Catholic Health
St. Francis Hospital
& Heart Center®

Community Health
Needs Assessment | 2022-2024

Approved and Adopted by the Board of Directors December 15, 2022

Community Health Needs Assessment and Improvement Plan

2022 – 2024

Thank you to all our partners who collaborated with us to assess the needs of our communities.

Nassau County Department of Health

Irina Gelman, DPM, MPH, Commissioner of Health

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Mineola, NY 11501

(516) 742-6154

Catholic Health

Mercy Hospital	1000 N Village Ave, Rockville Centre, NY 11571
St. Francis Hospital & Heart Center®	100 Port Washington Blvd, Roslyn, NY 11576
St. Joseph Hospital	4295 Hempstead Turnpike, Bethpage, NY 11714

Northwell Health System

Glen Cove Hospital	101 St. Andrews Lane, Glen Cove, NY 11542
Long Island Jewish Valley Stream	900 Franklin Ave, Valley Stream, NY 11580
North Shore University Hospital	300 Community Drive, Manhasset, NY 11030
Plainview Hospital	888 Old Country Road, Plainview NY 11803
Syosset Hospital	221 Jericho Turnpike, Syosset NY 11791

Nassau University Medical Center	2201 Hempstead Turnpike, East Meadow, NY 11554
Mount Sinai South Nassau	1 Healthy Way, Oceanside, NY 11572
NYU Langone Hospital – Long Island	259 First Street, Mineola, NY 11501

Coalition: The Long Island Health Collaborative (LIHC) is a coalition of the region's hospitals, local health departments, academic institutions, community-based organizations, medical societies, health plans, clinics and others dedicated to improving the health of all Long Islanders. The LIHC is overseen by the Nassau-Suffolk Hospital Council, the association that represents Long Island's hospitals. The LIHC provided oversight and management of the Community Health Needs Assessment processes, including data collection and analysis. This is done on behalf of the Long Island region (Nassau and Suffolk counties).

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INTRODUCTION

This Community Health Needs Assessment (CHNA) represents a collaboration between Catholic Health, the Long Island Health Collaborative (LIHC), local community-based agencies, patients living in our community and the Nassau County Department of Health. Catholic Health retained DataGen in the summer of 2022 to provide research analysis to facilitate this report, which defines the identified community health needs and barriers expressed by community members and the local community-based organizations that serve the region. This report's primary data was collected by the Long Island Health Collaborative from January 2021 through August 2022. It includes input and comments from community members and community leaders. The secondary data used is from years 2018 – 2021. The results from multiple analyses will enable Catholic Health to deploy new and existing chronic disease prevention strategies, address relevant social determinant of health risk factors, and work to reduce the health disparities identified. The COVID-19 pandemic placed a stark spotlight on health inequities in this region and this has reinforced Catholic Health's enduring mission to bring health and social care to all communities. St. Francis Hospital & Heart Center, one of six hospitals in the Catholic Health system, is located in Roslyn, New York, in the Town of North Hempstead. It is a 449-bed acute care hospital known nationally for its world-class cardiac care.

At Catholic Health, we are dedicated to addressing the significant health needs of the communities we serve. Catholic Health's six hospitals continue to build community health services and education programs in five core areas: chronic disease management, providing mental health services, treating and reducing substance use disorder, preventing communicable diseases and addressing the social determinants of health. In partnership with our community members and local nonprofits, churches, schools, and health departments, we are creating a healthier community, one patient at a time.

EXECUTIVE SUMMARY

St. Francis, along with Catholic Health's other five hospitals, worked with the Long Island Health Collaborative (LIHC) and the Nassau County Department of Health (NCDOH), and dozens of community-based organizations, libraries, schools and universities, local municipalities, and other community stakeholders to produce this CHNA. NCDOH representatives offered input and consultation, when appropriate, regarding the data analyses conducted by the LIHC and DataGen. Top, high-level findings include a continued prevalence of chronic disease incidence, particularly heart disease and diabetes, elevated rates of mental health and substance misuse issues among all demographic categories, with disparity seen among youth, and low-income communities of color continuing to experience a higher burden of disease overall. In 2022, members of the LIHC reviewed extensive data sets selected from both primary and secondary data sources to identify and

confirm New York State Prevention Agenda priorities for the 2022-2024 Community Health Needs Assessment cycle. Data analysis efforts were coordinated through the LIHC, which served as the centralized data return and analysis hub. As directed by the data results, community partners selected:

1. Prevent Chronic Disease
Focus Area 4: Chronic Disease Preventive Care and Management

2. Promote Well-Being and Prevent Mental and Substance Use Disorders
Focus Area 2: Mental and Substance Use Disorders Prevention

Primary data was obtained from a community health needs assessment sent to individuals and a similar survey to community-based organization leaders[1]. Additionally, we looked at results from two qualitative studies to round out our primary data.[2] Secondary data was derived from publicly-available data sets curated by DataGen into its proprietary data analytics platform, CHNA Advantage ™, offering 200 plus metrics to determine health issues within Nassau County.[3] As such, priorities selected for the 2022- 2024 cycle remain unchanged from the 2019 – 2021 cycle selection, and the selected health disparities in which partners are focusing their efforts rests on the inequities experienced by those in historically underserved communities and communities of color. Additional Prevention Agenda priorities/disparities St. Francis will address are outlined in the 2022-2024 work plan (See Appendix E).

St. Francis works with a broad and diverse of range of partners to connect with the community, to assess their needs through distribution and promotion of data collection tools, and to provide interventions in collaborative settings, when appropriate. See page 9 for our extensive list of partners. We also rely on the LIHC and its role as neutral convener and regional leader, espousing the collective impact model and framework.[4] As such, the LIHC serves as a backbone organization, providing its diverse partners with data analytics and administrative support in the areas of community outreach and education, and media relations support. LIHC's networking capabilities, its programs around walking and chronic disease awareness, and health messaging efforts reinforce and augment the interventions we provide in the chronic disease and mental health needs spaces so that we are continually in touch with the broader community. See Appendix F for a list of LIHC partners.

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[1] Community Health Assessment Survey (CHAS) assessing responses from individuals, summary report and survey instrument (Appendix A)
 CBO Survey Analysis 2022, assessing responses from community-based organization leader, summary report and survey instrument (Appendix B)
[2] Qualitative Analysis of Key informant Interviews Conducted among Community-Based Organization Leaders (Appendix C)
 Long Island Libraries: Caretakers of the Region's Social Support and Health Needs: Qualitative Analysis (Appendix D)
[3] Statewide Planning and Research Cooperative System (SPARCS), New York State Prevention Agenda dashboard, Behavioral Risk Factor Surveillance System (BRFSS), Extended Behavioral Risk Factor Surveillance System (eBRFSS), New York State Community Health Indicators by Race/Ethnicity Reports, Community Health Indicator Reports, Prevention Quality Indicators, CDC Places, and U.S. Census Bureau. The CHNA Advantage™ data analytics platform includes these and other state and national level indicators. It also encompasses social risk measures offered by Socially Determined, Inc.

[4] https://collectiveimpactforum.org/

St. Francis Hospital & Heart Center
New York's Hospitals and Health Systems Improve the Economy and Community

Economic and Community Benefits

$1,477,000,000
Economic activity

5,900
Jobs generated

$403,000,000
Payroll expenditures

$212,000,000
Tax dollars generated

$60,000,000
Community benefits and investments

Patients Served in 2020

171,000
Outpatients provided care

29,000
People treated in the emergency room

18,000
People admitted to hospitals

State and Federal Funding

48%

Reimbursement from Medicare and Medicaid
At this hospital, 71% of inpatient discharges and 61% of outpatient visits are covered by Medicare and Medicaid.

Source: Healthcare Association of New York State

Description of Community

Demographics

Nassau County's total population as of 2020 is 1,395,774 (47.3% male; 49.8% female). Those ages 15-44 represent of 35.1% females; 37.5% of males; ages 60 plus represent 22.6% of males and 26.6% of females; 18 plus represent 77.3% of males and 79.5% of females.

The region is predominately White at 58.5% with 10.9% Black/African American (a decrease from 11.5% last report) and 11.7% Asian (up from 9.1%). Hispanic or Latino represent 18.3% of the population[5], a two percent increase from the last report.

Interestingly, according to the Robert Wood Johnson Foundation's 2022 County Health Rankings,[6] Nassau County ranks fourth for health outcomes and first for health factors. Health factors represent health issues that can improve length and quality of life. Health outcomes represent how healthy a county is right now.

Geographic description

Nassau County is situated east of New York City and spans 453 miles. It is one of two counties that comprise Long Island, the eastern-most part of New York State. Nassau County is comprised of two cities: Long Beach and Glen Cove and three townships: Hempstead, North Hempstead, and Oyster Bay. Long Island is bounded on the north by Long Island Sound and on the east and south by the Atlantic Ocean. The west of the county is joined to Queens County and Kings County (or Brooklyn). These are two of the five boroughs of New York City. Catholic Health serves patients in eastern Queens and parts of western Suffolk County.

Socioeconomic information

In terms of income, 31% of the population earn less than $74, 999 (up from 26.5% in the last report) with 13.5% of that group earning less than $34,999 annually. Of the population, 6.2% of those under 18 years of age live in poverty, while 5.1% of those ages 18 to 64 live in poverty and for those ages 18 to 34 years of age, 6.4% live in poverty.[7] The percentage of the population (5 years and over) that speaks a language other than English at home is 28.8%, with Spanish the dominant other language spoken (12.8%) followed by other Indo/European languages (9.9%) and Asian languages (4.9%). In terms of education, for those age 25 and over, 91.6% are high school graduates or higher, 46.7% hold a bachelor's degree or higher. The percent of the total population uninsured is 4.1%. Of that percent, non-citizens represent 36.3%, Hispanic Latino (43%) and Black/African American (13.6%), Asian (12.8%) and White (43.2%). Of the uninsured, 40.4% earn less than $74,999 household income and 10.1% earn under $25,000 household income. Approximately 8.5% of the total non-institutionalized population is disabled. By race/ethnicity, 11.4% of the Native Hawaiian/Pacific Islander population is disabled, 10.8% of the American Indian/Alaska Native population is disabled, 9.7% of the White population is disabled, 5.4% of the Hispanic Latino population is disabled and 7.1% of the Black/African American population is disabled.

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[5] U.S. Census Bureau, 2020 Decenniel Census
[6] https://www.countyhealthrankings.org/reports/2022-county-health-rankings-national-findings-report
[7] U.S. Census Bureau, 2016-2020 American Community Survey, Five-Year Estimate

Interestingly, Native American/Pacific Islanders account for less than one percent of the county's population.[8]

Income – one social determinant of health – precludes individuals from low-income communities from accessing preventive and/or medical care due to their difficulty to afford co-payments/deductibles (if insured) or care at all if they are uninsured. The inability to afford co-pays and deductibles consistently rises to the top as a barrier to health care on the LIHC's Community Health Assessment Survey year after year. The median household income in the past 12 months by race is $124,300 (White), $105,331 (Black), $95,890 (Hispanic/Latino). Mean income for the past 12 months per capita by race is $60,972, $38,622 and $31,976, respectively.[9] This is why income is such a driving factor for health disparity and why the region has selected to focus on interventions and strategies that level the playing field for communities that are pockets of poverty in a rather affluent region.

Municipalities in target community

St. Francis' primary service area is Nassau County, but the hospital also serves patients from eastern Queens and western Suffolk. The chart below defines the zip codes and municipalities (towns) comprising St. Francis' service area.

Zip Code	Towns	Zip Code	Towns
11701	Amityville, Copiague, North Amityville, North Lindenhurst	11548	Greenvale, East Hills, Old Brookville, Roslyn Harbor, Glenwood Landing
11596	Williston Park, East Williston	11797	Woodbury, Plainview, West Hills
11021	Great Neck, Great Neck Plaza, Manhasset	11050	Port Washington, Sands Point, Manorhaven
11510	Baldwin, Baldwin Harbor, Oceanside	11758	Massapequa, North Massapequa, East Massapequa, South Farmingdale
11709	Bayville	11030	Manhasset, Plandome, Munsey Park
11520	Freeport, Merrick, Roosevelt, Baldwin Harbor	11554	East Meadow, Uniondale
11572	Oceanside	11756	Levittown
11570	Rockville Centre, South Hempstead, Lakeview	11542	Glen Cove, Glen Head
11771	Oyster Bay, Oyster Bay Cove, Upper Brookville	11576	Roslyn, East Hills, Roslyn Harbor, Roslyn Estates, North Hills, Flower Hill, Searingtown
11747	Melville, Dix Hills, West Hills	11040	New Hyde Park, Garden City Park
11501	Mineola, Garden City, Williston Park	11710	Bellmore, North Bellmore, Wantagh
11514	Carle Place, Westbury, Mineola, Uniondale	11793	Wantagh, Levittown, North Bellmore
11565	Malverne, Malverne Park Oaks	11577	Roslyn Heights, Roslyn, East Hills, Albertson, Searingtown
11001	Floral Park, Bellerose, South Floral Park, Elmont, North New Hyde Park	11590	Westbury, Jericho, Salisbury, East Meadow, Uniondale, New Cassel, Hicksville
11724	Cold Spring Harbor, Huntington, Lloyd Harbor	11566	Merrick, North Merrick, North Bellmore
11725	Commack, Smithtown	11801	Hicksville, Bethpage, Jericho
11003	Elmont, North Valley Stream	11714	Bethpage, Plainedge
11731	East Northport, Commack, Elwood, Dix Hills	11561	Long Beach, Lido Beach, East Atlantic Beach
11010	Franklin Square, Garden City South	11783	Seaford, Wantagh, Levittown
11547	Glenwood Landing	11746	Huntington Station, Dix Hills, South Huntington, Melville, West Hills
11558	Island Park, Harbor Isle, Barnum Island	11762	Massapequa Park, East Massapequa, North Massapequa
11753	Jericho, Muttontown	11580	Valley Stream, North Valley Stream, Franklin Square
11575	Roosevelt, Baldwin	11550	Hempstead, South Hempstead, Uniondale, West Hempstead
11568	Old Westbury, Brookville	11803	Plainview, Bethpage, Old Bethpage
11361	Bayside	11735	Farmingdale, South Farmingdale
11507	Albertson, Searingtown, Roslyn Heights, North Hills	11545	Glen Head, Brookville, Old Brookville
11740	Greenlawn, Huntington, East Northport, Elwood	11791	Syosset, Muttontown, Laurel Hollow, Oyster Bay Cove, Hicksville

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[8] U.S. Census Bureau, 2016-2020 American Community Survey, Five-year Estimates
[9] U.S. Census Bureau, 2016-2020 American Community Survey, 5 Year Estimates

Nassau County is unique in that it presents complex polarity, representing a wide range of both healthy and sick community members from opposite ends of the health spectrum. There are eight select communities in which a variety of socioeconomic factors lead to vast health disparities. These select communities were determined by the Nassau County Department of Health with concurrence from hospital partners. These communities are: Freeport, Hempstead, Inwood, Westbury, Roosevelt, Uniondale, Elmont, and Glen Cove. Catholic Health and its partners continue to concentrate efforts in these select communities.

Source: Profiles Map | Nassau County, NY - Official Website (nassaucountyny.gov)

Health behaviors, outcomes, and social determinants of health indicators in the chart below compare St. Francis key outreach communities (the eight select communities).

CHNA Advantage™ Analytics Platform

Category	Measure Name	*National Benchmark*	*State Benchmark*	Elmont	Freeport	Glen Cove	Hempstead	Inwood	Roosevelt	Uniondale	Westbury
Behaviors	Binge Drinking-Percentage	17.86	18.60	18.50	18.80	18.60	18.70	18.10	18.50	18.30	18.90
	Smoking-Percentage	17.44	15.74	14.10	15.30	14.80	18.05	18.00	16.90	16.30	14.30
Outcomes	Cancer-Percentage	6.56	6.53	6.00	6.00	7.60	4.90	5.90	5.10	5.70	6.80
	Diabetes-Percentage	10.51	10.22	11.50	12.30	11.10	13.40	13.40	13.50	13.20	11.20
	Obesity-Percentage	32.08	28.33	30.30	32.40	28.50	35.27	33.70	35.90	34.00	29.10
	Teen Births-Percentage	2.78	1.78	0.00	3.40	0.00	2.48	24.02	0.00	6.34	0.00
	Poor Mental Health-Percentage	14.98	13.89	12.70	13.50	13.20	15.94	15.60	14.50	14.50	12.80
SDOH	Uninsured-Percentage	8.73	5.38	5.60	8.30	7.80	11.55	10.10	8.10	8.00	7.50
	Health Literacy Risk-Percentage	36.97	40.43	96.00	86.00	56.00	92.90	79.00	100.00	96.00	61.00
	Health Literacy Risk-Risk Score (1-5)	3.07	3.19	4.40	4.40	3.60	4.71	4.50	5.00	4.80	3.80
	Food Risk-Percentage	28.30	32.39	2.00	33.00	36.00	35.31	36.00	9.00	22.00	16.00
	Food Risk-Risk Score (1-5)	2.88	3.05	2.40	3.10	3.30	3.28	3.40	2.80	3.10	2.70
	Healthy Food Options-Rate (per 10,000)	3.39	4.12	3.59	4.60	3.53	2.98	1.20	4.66	1.92	6.35
	Unhealthy Food Options-Rate (per 10,000)	16.08	15.78	16.85	15.33	23.78	12.07	17.26	10.10	17.33	18.94
	Housing Risk-Percentage	28.07	47.89	2.00	29.00	6.00	31.49	37.00	0.00	0.00	5.00
	Housing Risk-Risk Score (1-5)	2.77	3.38	2.10	2.90	2.60	3.22	3.20	2.40	2.60	2.30
	Housing Share of Income-Percentage	0.26	0.40	0.37	0.41	0.38	0.49	0.49	0.39	0.43	0.34
	Median Housing Cost-Dollars	1,245	1,566	2,470	2,145	1,933	1,976	1,870	2,232	2,178	2,273
	Income After Housing-Dollars	1,463	1,187	1,131	1,017	1,167	612	604	930	758	1,369
	Median Household Income-Dollars	70,677	77,814	103,548	86,070	78,242	70,728	59,943	90,707	83,570	113,338
Utilization	Dentist Visits-Percentage	64.12	66.60	69.10	65.00	68.50	59.00	60.20	61.20	61.90	69.30

Category	Measure Name	*National Benchmark	*State Benchmark	Elmont	Freeport	Glen Cove	Hempstead	Inwood	Roosevelt	Uniondale	Westbury
Population	Total Population-Thousand Individuals	326,524	19,515	45	43	28	60	8	17	27	47
Demographics	African American-Percentage	12.62	15.39	47.00	28.50	5.71	45.17	21.70	56.10	41.02	21.52
	American Indian or Alaskan Native-Percentage	0.82	0.39	0.10	0.18	0.55	0.50	0.00	2.31	1.65	0.02
	Asian-Percentage	5.64	8.58	14.81	1.83	5.40	2.34	3.83	1.05	1.62	9.86
	Hispanic-Percentage	18.18	19.07	19.52	42.23	30.56	42.72	45.86	39.92	45.97	32.05
	White-Percentage	70.42	62.31	21.22	41.42	66.58	17.07	42.75	18.38	32.01	46.33
SDOH	Below Poverty Level-Percentage	12.95	13.63	6.40	8.00	12.70	17.30	17.90	10.00	12.00	5.90

DataGen Analytics Platform. 2018-2020 Eight Select Communities, Health Outcomes Compared to New York State and National Benchmarks

Collaborating Partners: Health Care and Other Key Institutions

As part of our collective impact strategies to promote health and well-being for residents in our communities, St. Francis has strong relationships with local and regional community-based organizations, libraries, schools, faith-based organizations, the local health department, local fire departments and municipalities that support and partner with us to reduce chronic disease, mental health and substance misuse, and to promote health equity. Following is an extensive partner list of health care and other key institutions.

- Adelphi University Breast Cancer Hotline & Support Program (Sisters United in Health)
- AHRC, Freeport
- American Cancer Society
- American Diabetes Association
- American Heart Association
- American Lung Association
- American Parkinson's Disease Association
- Apna Ghar, Hicksville
- Baldwin Library
- Bayville Library
- Bethel AME Church, Freeport
- Blessed Sacrament Church, Valley Stream
- Cancer Services Program of Nassau County
- Catholic Charities
- Catholic Faith Network (formerly Telecare TV)
- Catholic Health, Melville
- Catholic Health Home Care, Farmingdale
- Cherry Lane Elementary School, Carle Place
- Christ First Presbyterian Church, Hempstead
- Cold Spring Harbor Library
- Commack branch, Smithtown Library
- Cornell Cooperative Extension/Eat Smart NY
- Deepdale Cares NORES – Little Neck
- Dominic A. Murray 21 Memorial Foundation
- Elmont Memorial High School, Elmont
- Elmont Public Library, Elmont
- Empower, Assist, Care (EAC), Long Beach and North Merrick
- Fidelis Care

- Fire Departments: Centerport, Dix Hills, Eatons Neck, Greenlawn, East Northport, Farmingdale, Westbury, New Hyde Park, Merrick Hook and Ladder, Farmingdale, Manhasset, Lakeville
- Freeport Memorial Library, Freeport
- Freeport Recreation Center, Freeport
- Floral Park Seniors
- Gerald J. Ryan Outreach Center, Wyandanch
- Gift of Life, Inc.
- Glen Cove Public Library, Glen Cove
- Glen Cove Senior Center, Glen Cove
- Glen Cove YMCA
- Great Neck Library
- Gold Coast Library
- Good Samaritan University Hospital, West Islip
- Good Samaritan Nursing & Rehabilitation Care Center, Sayville
- Good Shepherd Hospice, Farmingdale
- The Grand Healthcare (Whitestone)
- Great Neck Public Library
- Great Neck Public Schools
- Health & Welfare Council, LI
- Hempstead Library
- Hempstead Senior Community Center, Hempstead
- High School for Construction Trades Engineering and Architecture
- Island Harvest, numerous sites throughout Nassau County's select communities
- Island Trees Library
- JASA, Long Beach & Jamaica, NY
- King Kullen, Bethpage
- The Knolls in East Meadow
- Leukemia & Lymphoma Society
- Levittown United Teachers
- Lindenhurst Library

- Locust Valley Library
- Long Island Blood Services
- Long Island Cares
- Long Island Health Collaborative (LIHC)
- Louis J. Acompora Memorial Foundation
- Magnolia Gardens, Westbury
- Magnolia Senior Center (Long Beach)
- Manhasset Women's Coalition against Breast Cancer
- Mary's Manor & Enriched Housing, Inwood
- Mental Health Association of Nassau County
- Memorial Presbyterian Church, Roosevelt
- Mercy Hospital, Rockville Centre
- Merrick Library
- Mill Neck Manor School for the Deaf Mill Pond Acres, Port Washington
- Nassau Community College Health Fair
- Nassau County Dept. of Human Services, Office of Mental Health-Chemical Dependency & Developmental Disabilities, Behavioral Health Awareness Campaign
- Nassau County Office for the Aging, the NYS Office for the Aging & Federal Administration on Aging
- New York Institute of Technology College of Osteopathic Medicine, Old Westbury & Central Islip
- New York State Department of Transportation Health and Safety – Sunken Meadow Park, Kings Park
- North Hempstead YES Community Center, Westbury
- North Massapequa Community Center
- North Shore Schools
- Northport Library
- Our Lady of Consolation Nursing & Rehabilitation Care Center, West Islip
- Our Lady of Fatima, Manorhaven
- Our Lady of Good Counsel Church, Inwood
- Our Lady of Loretto Church, Hempstead
- Our Lady of Mercy Academy
- Paternana Terrace, Freeport
- Paul D. Schreiber High School, Port Washington
- Paumanack Village (Greenlawn)

- Port Washington Seniors
- Queen of the Most Holy Rosary Church
- Rev. Mitchell Mallette Housing Complex, Freeport
- Roosevelt Library
- Salisbury Seniors
- Sid Jacobson Jewish Community Center, East Hills
- Society of St. Vincent de Paul
- South Bay Cardiovascular
- South Huntington School District
- St. Aloysius Church, Great Neck
- St. Boniface Church, Elmont
- St. Brigid Church, Westbury
- St. Brigid Senior Center, Westbury
- St. Catherine of Siena Hospital, Smithtown
- St. Catherine of Siena Nursing & Rehabilitation Care Center, Smithtown
- St. Charles Hospital, Port Jefferson
- St. Joseph Hospital, Bethpage
- St. Kilian Church, Farmingdale
- St. Mary of the Isle Church, Long Beach
- St. Patrick Church, Glen Cove
- St. Peter of Alcantara R.C. Church, Port Washington
- St. Vincent de Paul Church, Elmont
- Stony Brook Medicine/Creating Healthy Schools and Communities
- Sustainable Long Island/Creating Healthy Schools and Communities
- Temple Beth Shalom, Roslyn
- Town of Hempstead Project Independence Center, Hempstead
- Uncle Giuseppe's Marketplace, Port Washington, Smithtown, Massapequa and East Meadow
- Uniondale Public Library, Uniondale
- Westbury Memorial Library, Westbury
- Western Suffolk BOCES/Creating Healthy Schools and Communities
- YAM Community Resource, Inc., Huntington Station
- YMCA, Glen Cove

St. Francis also relies upon the LIHC to disseminate information about the importance of proper nutrition and physical activity among the general public to assist Nassau residents in better managing their chronic diseases and/or preventing the onset of chronic diseases. St. Francis also relies upon the LIHC to disseminate information about mental health prevention and treatment services and programming, as well as relevant information about substance misuse. Dissemination of information is achieved through the bi-weekly *Collaborative Communications* e-newsletter, which is sent to 588 community-based organization leaders, and strategic use of social media platforms. These efforts are ongoing. The work plan (see Appendix E) outlines anticipated measures and activities for 2023 supported by the LIHC. Finally, St. Francis participates in the LIHC's quarterly stakeholder meetings and avails itself of LIHC's extensive network. *See Appendix F for a list of partners*. A representative from the Nassau County Department of Health also participated in the monthly 2022 CHNA Workgroup – September 2021 – April 2022. *(See Appendix G for list of workgroup members)*

Existing health disparities

Low-income communities of color, especially the identified eight select communities, bear a greater burden of chronic disease, which is exacerbated by social determinant of health need factors.

Financially stressed individuals have difficulty affording nutritious foods, leaving them more vulnerable to poorer chronic disease management outcomes, since nutrition and diet play a pivotal role in every chronic disease. This is one of the reasons why Catholic Health has embarked on new food insecurity initiatives with community partners Long Island Cares, Catholic Charities, and the Health and Welfare Council of Long Island.

Food insecure patients identified via screening receive food "to go" bags through Catholic Health's partnership with LI Cares.

Catholic Health is also collaborating with Catholic Charities and Health and Welfare Council of Long Island to enroll individuals and families identified as food insecure in the Supplemental Nutrition Assistant Program (SNAP).

According to Feeding America, **5.7% of Nassau County residents are food insecure**, which represents 77,750 community members. Another Feeding America study, Map the Meal Gap 2020, examined the cost of food and cost of living in zip codes across the United States. Nassau County's Annual Food Budget Shortfall represents $50,557,000, according to the study, and 44% of adults are living above the 200% federal poverty level for SNAP.[10]
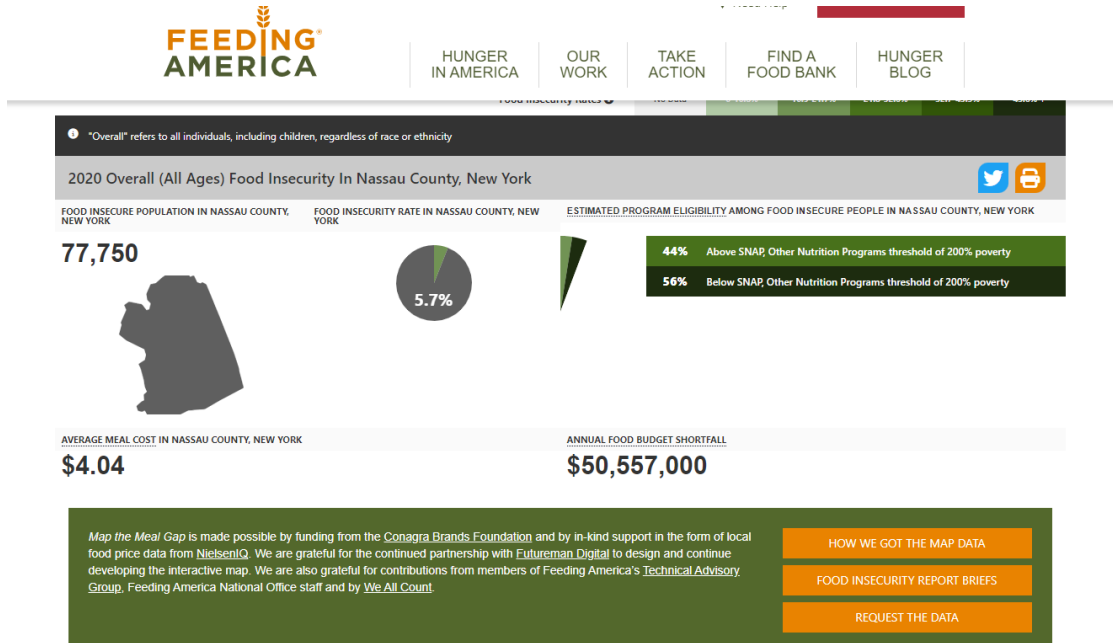
OVERVIEW OF IDENTIFIED NEEDS

Through the CHNA process, reducing chronic diseases and mental health illness/substance misuse have been identified as the top two priorities in our communities. Embedded within these priorities are areas of need, which the primary and secondary research revealed.

Areas of Identified Need

Access to care, health literacy, education, economic security (poverty), obesity and weight loss, food access, clean air and water

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[10] Feeding America. Map the Meal Gap 2020. Nassau County, New York. Retrieved 9/20/22.
https://map.feedingamerica.org/county/2020/overall/new-york/county/nassau

Primary data and secondary data demonstrate that residents living in Nassau County and Suffolk County are experiencing poor mental health status. The 2021 Robert Wood Johnson Foundation County Health Rankings examining New York counties Nassau and Suffolk in Quality-of-Life Health Outcomes demonstrate an average of 3.7 poor mental health days per 30 days for Nassau County residents and 4.0 poor mental health days per 30 days in Suffolk County. [11]

Mental health issues have soared in the past two years, spurred in part, by the effects of the pandemic. Using data from the U.S. Census Bureau's COVID-19 Household Pulse Survey (April 23, 2020 – October 26, 2020), a New York State Health Foundation analysis found that more than one-third of adult New Yorkers reported symptoms of anxiety and/or depression, with racial and ethnic groups of color as well as low-income New Yorkers, reporting the highest rates of poor mental health.

However, the 18 – 34-year-old age group reported the highest rates (49%) of poor mental health.[12] High school students (grades 9 through 12) fared just as poorly. A number of studies found poor mental health along with suicide ideation intensified during the pandemic for high schoolers, especially among females. An April 2022 analysis of data from the 2021 Adolescent Behaviors and Experiences Survey revealed that 37.1% of students experienced poor mental health during the pandemic, and 31.1% experienced poor mental health during the preceding 30 days.[13] The pandemic made a bad situation worse, especially for youth, as mental health issues and suicides were already increasing prior to the COVID-19 pandemic.[14] [15] [16] [17] With the shortage of mental health care workers and the lingering psychological effects of the pandemic, mental health services remain a top priority for the region. The county also saw an uptick in opioid-related overdoses and deaths after having made some gains prior to the pandemic. New York State Department of Health statistics report that for 2020 in Nassau County there were 223 deaths from any opioid, 77 heroin overdose deaths, and 214 deaths involving opioid pain relievers (including illicitly produced opioids such as fentanyl).[18] For 2019, the numbers were 173, 47, and 163, respectively via categories listed above.[19]

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[11] https://www.countyhealthrankings.org/app/new-york/2021/compare/snapshot?counties=36_059%2B36_103
[12] https://nyhealthfoundation.org/resource/mental-health-impact-of-the-coronavirus-pandemic-in-new-york-state/#:~:text=The%20proportion%20of%20New%20Yorkers,health%20throughout%20the%20survey%20period
[13] https://www.cdc.gov/mmwr/volumes/71/su/su7103a3.htm?s_cid=su7103a3_w
[14] https://www.cdc.gov/mmwr/volumes/66/wr/mm6630a6.htm
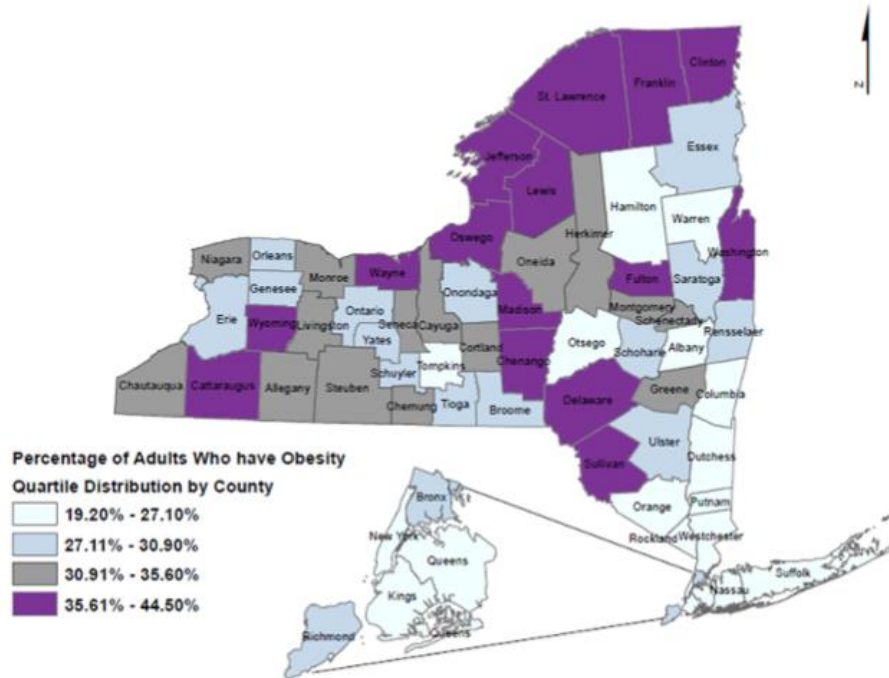[15] https://www.cdc.gov/nchs/fastats/mental-health.htm
[16] Weinberger, A. et al. (August 2017) Trends in depression prevalence in the USA from 2005 – 2015: widening disparities in vulnerable groups. *Psychological Medicine*, 1-10
[17] Bitsko, R et al. (2018) Epidemiology and impact of healthcare provider-diagnosed anxiety and depression among US children. *Journal of Developmental and Behavioral Pediatrics,* 1-9.
[18] https://www.health.ny.gov/statistics/opioid/data/pdf/nys_apr22.pdf
[19] https://www.health.ny.gov/statistics/opioid/data/pdf/nys_jan21.pdf

Prevalence of Obesity among New York State Adults, BRFSS 2018

Percentage of Adults Who have Obesity
Quartile Distribution by County
- 19.20% - 27.10%
- 27.11% - 30.90%
- 30.91% - 35.60%
- 35.61% - 44.50%

Source: New York State Behavioral Risk Factor Surveillance System (BRFSS). Overweight and Obesity, 2018.
https://www.health.ny.gov/statistics/brfss/reports/docs/2003_brfss_overweight_and_obesity.pdf

Another health disparity identified in primary and secondary research is adult obesity. Nassau County continues to experience high rates of obesity and overweight adults. Twenty three percent of the population (age 20 and older) reports a body mass index (BMI) greater than or equal to 30 kg/m^2.[20] According to New York State's Department of Health, obesity is a significant risk factor for many chronic diseases including type 2 diabetes, high blood pressure, asthma, stroke, heart disease and certain types of cancer.

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[20] https://www.health.ny.gov/statistics/prevention/injury_prevention/information_for_action/docs/2021-02_ifa_report.pdf

CHNA Advantage™ Analytics Platform

Category	Topic	Measure Name	Year	*State Benchmark*	Nassau
Outcomes	Condition Prevalence	Asthma (Medicare)-Percentage	2018	5.73	6.00
		Cancer (Medicare)-Percentage	2018	9.27	10.85
		CKD (Medicare)-Percentage	2018	22.36	21.80
		COPD (Medicare)-Percentage	2018	10.76	9.71
		Diabetes-Percentage	2019	9.40	9.20
		Heart_Failure (Medicare)-Percentage	2018	13.72	14.97
		Hypertension (Medicare)-Percentage	2018	53.32	59.33
		Low Birth Weight-Percentage	2020	7.78	7.92
		Obesity-Percentage	2017	25.84	24.20
		Stroke (Medicare)-Percentage	2018	3.85	5.13
		Teen Birth Rate (Asian)-Rate (per 1,000)	2020	2.61	0.76
		Teen Birth Rate (Black)-Rate (per 1,000)	2020	17.69	6.99
		Teen Birth Rate (Hispanic)-Rate (per 1,000)	2020	23.18	24.71
		Teen Birth Rate (White)-Rate (per 1,000)	2020	8.90	0.98
		Teen Birth Rate-Rate (per 1,000)	2020	13.57	6.31
	Life Quality	Poor Mental Health-Percentage	2019	13.18	11.60
		Poor/ Fair Health-Percentage	2019	17.48	14.20
		Premature Death (Asian)-Rate (YPLL per 100,000)	2020	2,739.24	2,448.47
		Premature Death (Black)-Rate (YPLL per 100,000)	2020	9,287.10	7,011.32
		Premature Death (Hispanic)-Rate (YPLL per 100,000)	2020	5,461.06	4,434.49
		Premature Death (White)-Rate (YPLL per 100,000)	2020	5,331.00	4,394.42
		Premature Death-Rate (YPLL per 100,000)	2020	5,836.36	4,556.44

DataGen Analytics Platform. 2018-2020 Nassau County Residents Health Outcomes Compared to New York State

The prevalence of chronic diseases is persistent in the county. Nationally, communities of color experience higher rates of chronic disease. Using diabetes as an example, the American Indian/Alaska Native population represents 14.5 percent of adults 18 or older who are diagnosed with diabetes followed by Black, non-Hispanic at 12.1% and Hispanic overall at 11.8% in the United States. Asians and Whites experience the disease at 9.5% and 7.4% respectively.[21] Health providers report that many individuals delayed preventive care and routine screenings due to the pandemic, leading to more complicated cases and unfavorable outcomes. Chronic diseases are preventable conditions sensitive to lifestyle (diet/physical activity) habits but hampered by the obstacles presented by social determinant of health factors —mainly income/employment, race/ethnicity, food access, housing/neighborhood location, and level of education. The county and hospitals identified in this report through collaborative efforts and facility-specific programming acknowledge and address these determinants regularly.

These are the **main health challenges and contributing causes** affecting residents of the county, especially in low-income communities of color. That these social determinants of health are predictors of chronic disease is well documented.[22] [23] [24] Health care access

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[21] https://www.cdc.gov/diabetes/health-equity/diabetes-by-the-numbers.html

[22] Cockerham WC, Hamby BW, Oates GR. The Social Determinants of Chronic Disease. Am J Prev Med. 2017 Jan;52(1S1):S5-S12. https://doi.org/10.1016%2Fj.amepre.2016.09.010. PMID: 27989293; PMCID: PMC5328595.

[23] Pantell MS, Prather AA, Downing JM, Gordon NP, Adler NE. Association of Social and Behavioral Risk Factors With Earlier Onset of Adult Hypertension and Diabetes. *JAMA Netw Open.* 2019;2(5):e193933. Https:/doi:10.1001/jamanetworkopen.2019.3933

[24] Vennu, V., Abdulrahman, T.A., Alenazi, A.M. *et al.* Associations between social determinants and the presence of chronic diseases: data from the osteoarthritis Initiative. *BMC Public Health* **20,** 1323 (2020). https://doi.org/10.1186/s12889-020-

issues are mostly tied to economics (quality of health insurance, employment, cost of living). In the mental health/substance misuse space, access is further hampered by a dearth of providers. Fear, which includes immigration status, is also a detriment to health care access.

As the pandemic revealed, Black and Hispanic individuals experienced higher rates of COVID-19 disease and death. These higher rates correlated to low-income areas and the higher rate of chronic disease seen in these communities. According to the Centers for Disease Control and Prevention (CDC), chronic disease is a leading risk factor for COVID-19 morbidity and mortality. The 2021 National Healthcare Quality and Disparities Report[25] notes that significant disparities still exist among racial or ethnic minority groups. Although the report's most recent data reference is 2018, we can examine one chronic disease—hypertension—and extrapolate that in recent years the incidence has not improved. The report notes that the rate of hospital admissions for hypertension was 212.9 per 100,000 population for Black adults compared with 38.4 per 100,000 cases for White adults and just over 50 cases per 100,000 for Hispanics. The New York State COVID-19 Fatalities Tracker[26] shows that the number one COVID-19 co-morbidity was and is hypertension.

From January to June of 2021, St. Francis provided 19,956 COVID-19 vaccines to community members.

The Long Island Vaccination HUB, the entity charged by the state with ensuring equitable distribution of vaccines, tracked vaccine distribution by the week until the spring of 2022. Catholic Health participated in the HUB, holding point of distribution (POD) clinics at churches and other community venues. Among patients who tested positive for COVID-19, Black, Hispanic, and Asian patients remained at higher risk for hospitalization and death

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[25] https://www.ahrq.gov/research/findings/nhqrdr/nhqdr21/index.html
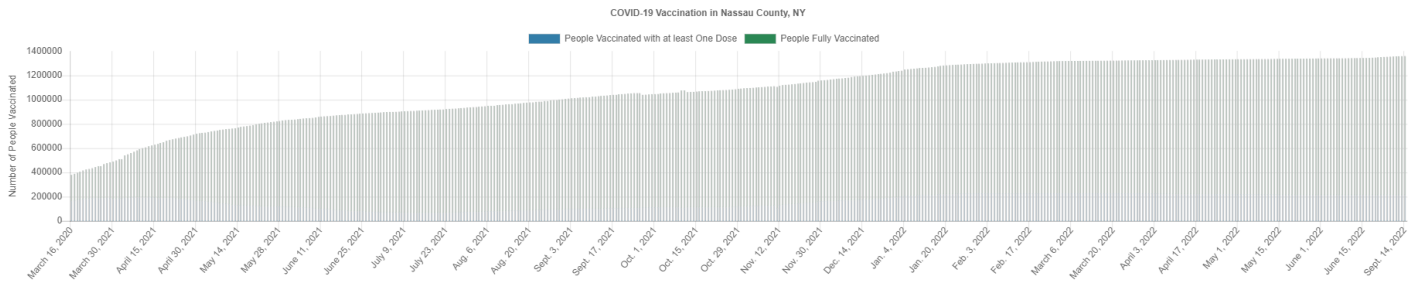
[26] https://coronavirus.health.ny.gov/fatalities-0

compared to White patients with similar socioeconomic characteristics and underlying health conditions, suggesting racism and discrimination may affect outcomes.[27]

COVID-19 Vaccination in Nassau County, NY

As of Sept. 14, 2022

Cumulative number of COVID-19 vaccination	Number	% in Populaton
People Vaccinated with at least One Dose	1,360,478	100.29%
People Fully Vaccinated	1,143,036	84.26%

COVID-19 Vaccination in Nassau County, NY

New York State COVID-19 Vaccination Demographics: Race & Ethnicity — Data as of: 9/23/2022

Percent of Individuals in Racial or Ethnic Group with Completed Vaccine Series

Group	Percent
Hispanic or Latino	72.3%
White	66.1%
African American	56.4%
Asian	86.9%
American Indian or Alaska Native	100.0%
Long Island	79.7%

Not Included Above
Total and Percent of People with Completed Vaccine Series

Unknown	155,846	6.9%
Other Race	176,210	7.8%
Two or More Races	3,244	0.1%

Source: [Demographic Vaccination Data | Department of Health (ny.gov)](#)

As of September 23, 2022, 72% of Latino adults, 66% of White adults 56% of Black adults have been fully vaccinated against COVID-19 in Nassau County. Ongoing partner efforts will continue to promote booster vaccines to eligible community residents

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[27] https://www.kff.org/coronavirus-covid-19/issue-brief/covid-19-racial-disparities-testing-infection-hospitalization-death-analysis-epic-patient-data/

Guided by the LIHC, Catholic Health and all regional partners reviewed results from the two qualitative analyses and two quantitative analyses, our sources of primary data, and a variety of secondary data analyses provided by DataGen, which were drawn from national, state, and county publicly available datasets, as well as proprietary health determinant data metrics from Socially Determined, Inc.

The **engagement process** we used to select the two priorities was purposeful and collaborative. On April 5, 2022, at 8 a.m., the LIHC posted results of all its data analyses. The members of the 2022 CHNA Workgroup were asked to review the results in advance of the priority selection meeting, which occurred on April 5, 2022, at 1 p.m. via Zoom. The data analyst walked participants through screenshots of the relevant findings. Participants also viewed the Prevention Agenda dashboard, diving deep into the goals, objectives, and recommended interventions for each priority. Present at the meeting were representatives from Long Island's two health departments and representatives from Long Island's hospitals/health systems, as well as staff of the LIHC. Attendees discussed primary and secondary data results and based the selection of priorities on the following criteria:

✓ The overwhelming evidence presented by the data, especially the first two questions of the Community Health Assessment Survey
✓ The activities/strategies/interventions currently in place throughout the region
✓ The feasibility of achieving momentum and success with a chosen priority, taking into account the diversity of partners and community members served
✓ Comments from community members and others regarding the previous CHNA

After an official vote, the priorities were selected unanimously. The April meeting was a culmination of seven LIHC work group meetings held each month, beginning in September 2021 and concluding in April 2022. At these meetings, in addition to representatives noted above, community-based organization leaders from a diversity of sectors offered input.

Broad Community Engagement

Engagement of the broader community, for **assessment purposes**, is achieved through the LIHC's and its partners' ongoing distribution of the Community Health Needs Assessment – the main primary research tool used to gauge community health needs, social support needs, and barriers to health care on an ongoing basis. This survey is offered online via a SurveyMonkey link and is available in paper format to residents at public events, workshops, educational programs, and interventions which are offered by St. Francis and other LIHC partners. A paper version is also distributed among physician offices, hospital waiting areas, libraries, schools, federally qualified health clinics, insurance enrollment sites, and other public venues. The LIHC vigilantly promotes the survey through social media and asks LIHC participants to post the survey link on each of their websites. The LIHC provides a social media toolkit with an opportunity for co-branding to facilitate participation and St. Francis has availed itself of this service. St. Francis posts this survey and the SurveyMonkey link on its website and in electronic and print community newsletters. The survey can also be accessed via a QR code. Results from the Community

Health Assessment Survey are analyzed yearly. Findings are shared with all LIHC participants, with the media, and posted on the LIHC website. A certified translation of the survey is available in the following languages: Spanish, Polish, and Haitian Creole. Large print copies are also available to those living with vision impairment.

Engagement of the broader community, for **implementation purposes**, is assisted by the LIHC's encouragement of community members to participate in programs, workshops, support groups and educational programs offered by St. Francis and all LIHC partners. In addition, the LIHC offers limited programming itself, such as the Walk Safe with a Doc events and Talk with a Doc events (presented in collaboration with AARP-LI). All LIHC quarterly meetings are open to the public and recordings of the meetings are housed on its website. The LIHC, on behalf of all its participants and the community members each participant serves, supports the following evidence-based activities and programs:

- ✓ Awareness Campaign (Live Better) about chronic disease via social media and traditional media platforms (this campaign captures any mentions about chronic diseases and relevant programs/education efforts)
- ✓ Awareness Campaign about mental health prevention and treatment programs/education, as well as relevant treatment and prevention programming relative to substance misuse via social media and traditional media platforms (this campaign captures any mentions about mental health/substance misuse programs/events/workshops, etc.)
- ✓ Walk Safe with a Doc are community walking events that combine pedestrian safety education with chronic disease education all while walking. The LIHC maintains an active Walk with a Doc chapter for the region.
- ✓ Talk with a Doc are Zoom-delivered educational programs led by physicians from the region's hospitals covering a variety of chronic diseases.

When they first gathered in 2013, LIHC partners embraced walking as a simple, low-cost, easy activity that most anyone of any age can perform. Walking is an evidence-based intervention that offers proven benefits to one's physical and mental health. The Walk with a Doc chapter is the activity through which LIHC, and its partners promote the health benefits of walking. *See Research and Supporting Evidence in Appendix H.* Collaborative participants rely upon LIHC's use of social media and traditional media to cross-promote collaborative partners' programs, interventions, events, workshops, etc., as well as general messaging about healthy lifestyle behaviors (physical activity and proper nutrition). Awareness campaigns use best practices for message conveyance. There is evidence as to the user engagement and sustainability effects of social media and mass media regarding health messaging. Investigation in this area is ongoing (*See Research and Supporting Evidence in Appendix H).* The Community Guide, a website that houses the official collection of all Community Preventive Services Task Force findings and the systemic reviews on which they are based, was also referenced.[28]

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[28] https://www.thecommunityguide.org/

SPECIFIC METHODOLOGIES FOR RESEARCH

Catholic Health obtained population level and zip code analyses on social determinant of health drivers and health/risk factors dominant in Catholic Health's service area from its data partner, DataGen. We also looked at hospital utilization data and emergency department data to discern top diagnoses. A survey completed by individual community members, a similar survey completed by community-based organization leaders, key informant interviews with selected leaders, and the results of qualitative research among public library personnel rounded out the research for this cycle's CHNA. The CHNA approach used both quantitative and qualitative research methods designed to evaluate the perspectives and opinions of stakeholders and health care consumers. The methodology helped develop a broad, community-based list of needs — in addition to prioritizing the needs and establishing a basis for continued community engagement.

400+ CBO LEADER SURVEYS DISTRIBUTED **44** COMPLETED & **12** KEY INFORMANT INTERVIEWS	**1100+** COMMUNITY MEMBER SURVEYS COMPLETED	**200** METRICS FROM 20+ DOMAINS (DEMOGRAPHIC, SDOH, HEALTHCARE)

Primary Research

Quantitative Methods and Research Tools *(See appendix for full reports and tools)*

Community Health Needs Assessment Survey (CHAS) – measured individual and community level perception of health needs and barriers. A total of 1,143 were completed during the period of January 2021 – December 2021. A subsequent analysis particular to the zip codes in St. Francis' service area was completed by analyzing 439 surveys collected during the period January 2022 – August 2022. The CHAS provides a snapshot in time of the main health challenges facing communities. It uses the SurveyMonkey platform. Convenience sampling method.

CBO Community Needs Assessment Survey – community-based organization (CBO) leader perception of health needs and barriers faced by their constituents/patients. A total of 44 surveys were completed (10 from Nassau County, 25 from Suffolk County, 9 with no location specified). The survey was distributed to 400 plus leaders during the time period December 1, 2021 - January 15, 2022. It uses the SurveyMonkey platform. Purposeful sampling method.

Qualitative Methods and Research Tools *(See appendix for full reports and tools)*

CBO Key Informant Interviews – of the 44 CBO leaders who completed the above-mentioned CBO community needs assessment, 23 agreed to a follow-up in-depth interview and 12 actually participated. The interviews were conducted February 23, 2022, to March 4, 2022, via Zoom and recorded. Atlas Ti version 22 web-based platform used for grounded-theory analysis.
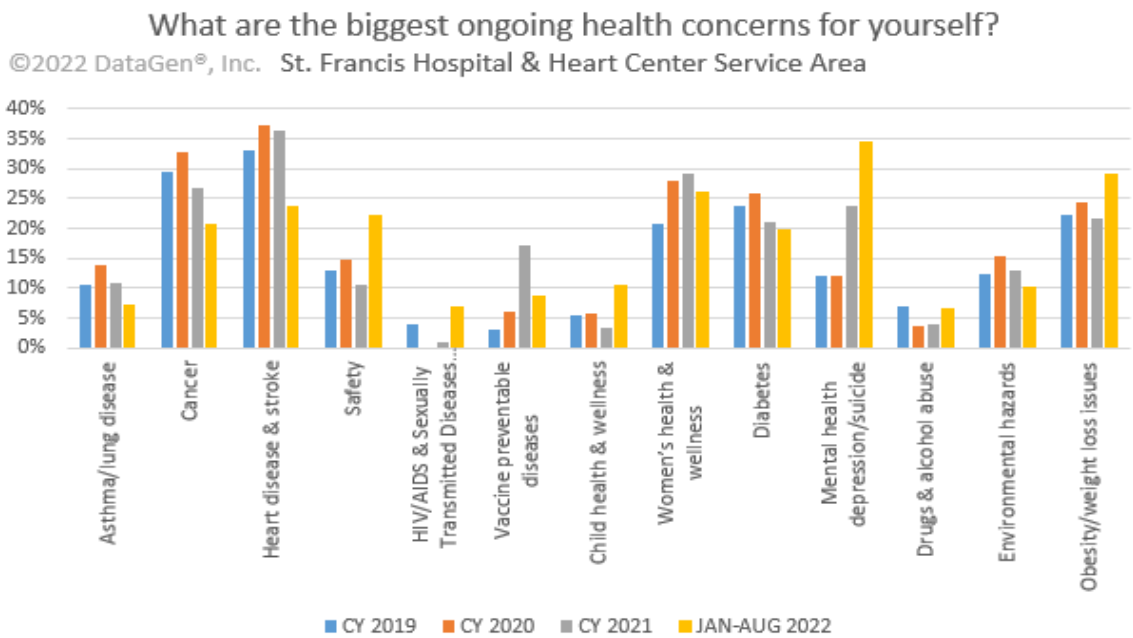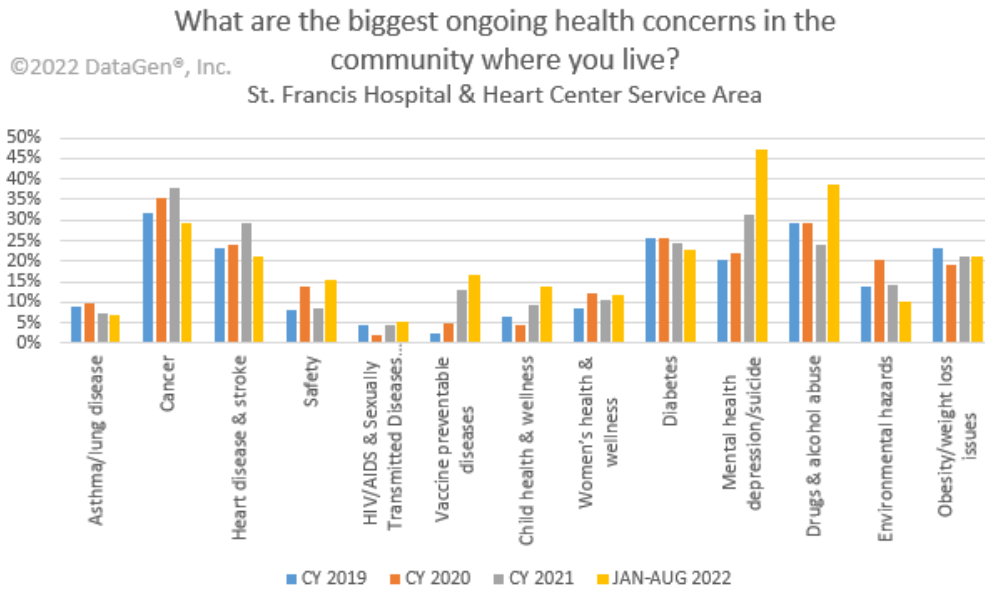
Library Research Project – a two-year study providing an insider look at the health and social support needs of patrons who frequent Long Island's public libraries. Library personnel at randomly selected libraries throughout Nassau County were selected for this study. A total of 96 interviews (Nassau and Suffolk County libraries) were conducted during the time period December 2017 to February 2020. Interviews were recorded, then transcribed, and analyzed using Dedoose qualitative software (grounded theory) for recurring themes with the report "*Long Island's Libraries: Caretakers of the Region's Social Support and Health Needs*" issued July 2021. Stony Brook University Program in Public Health researchers and students completed the analysis. The analysis considered the socioeconomic differences of communities by location, the influence of social determinants of health, and the Prevention Agenda priorities.

Secondary Research

✓ The secondary data research included a thorough analysis of previously published materials/metrics that provide insight regarding the community and health-related measures.

✓ *SPARCS (Statewide Planning and Research Cooperative System)* – analysis of hospitalization data 2018, 2019, 2020.

✓ *Emergency Department Visits* – analysis of St. Francis emergency department visits during the time period July 1, 2021, to June 30, 2022, to discern top diagnoses.

✓ *Socially Determined*, Inc. social risk analytics spanning 200 metrics drawn from a variety of publicly available national, state, and county datasets. Zip code and census track level data.

FINDINGS TO SUPPORT IDENTIFIED NEEDS

Data from both the primary and secondary sources revealed the following concerns.

What are the biggest ongoing health concerns in the community where you live?

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St. Francis Hospital & Heart Center Service Area

Legend: CY 2019, CY 2020, CY 2021, JAN-AUG 2022

What are the biggest ongoing health concerns for yourself?

©2022 DataGen®, Inc.   St. Francis Hospital & Heart Center Service Area

Legend: CY 2019, CY 2020, CY 2021, JAN-AUG 2022

In the above charts, survey respondents answered what their community and individual health concerns are from their perspective. The results represent survey responses over three years and eight months for identified health concerns. We focused on the most current results – 2022. There is a significant increase in 2022 for mental health, depression/suicide and drugs and alcohol abuse by survey respondents regarding their perception on the biggest ongoing health concerns in the community. Further, when answering questions about individual health, survey takers indicated mental health/depression again along with obesity/weight loss issues, safety, diabetes, and

women's health and wellness. In calendar years 2020 and 2021, heart disease and stroke concerns were elevated, before dipping in the eight-month analysis for 2022.
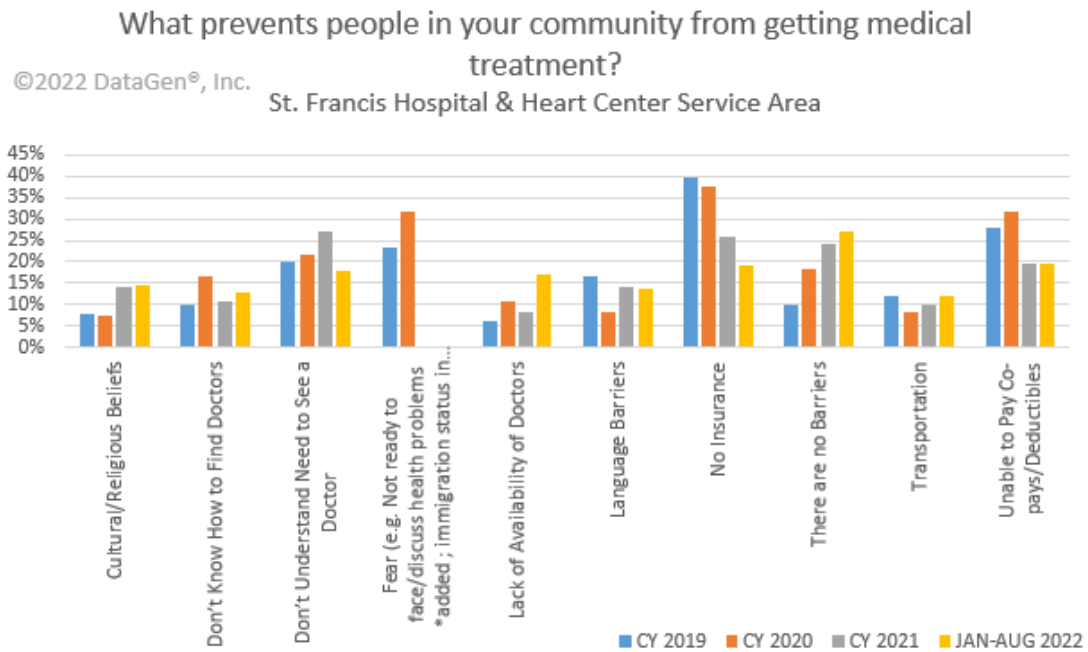
The chart above shows the inability to afford co-pays and deductibles as a consistent barrier, supporting the disparity around low-income as well as fear in seeing a doctor. Poverty and economic distress were also identified in community key informant interviews.
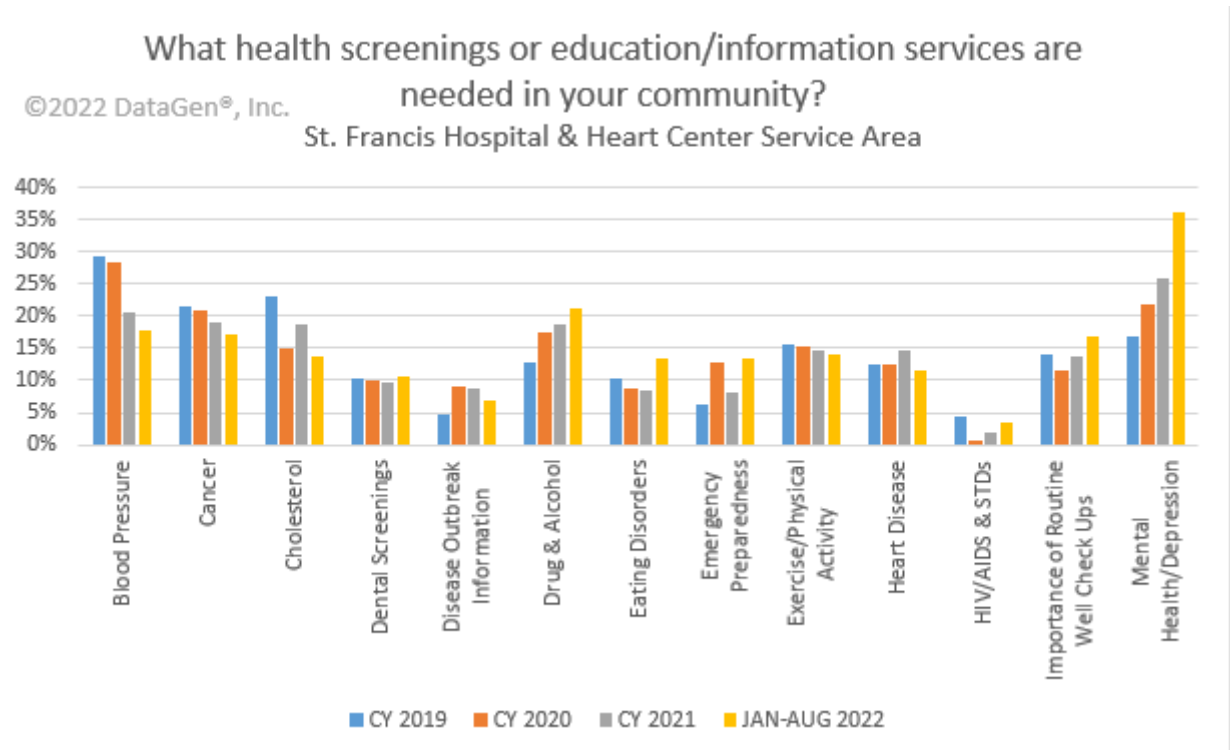
In the chart above, responses reveal an obvious need for mental health and substance abuse services, followed by cancer and cardiovascular issues, especially hypertension.

SPARCS Analyses (Statewide Planning and Research Cooperative System), Nassau County Hospitalization Data[29]

SPARCS is a comprehensive all payer data reporting system established in 1979 as a result of cooperation between the health care industry and government. The system was initially created to collect information on discharges from hospitals. SPARCS currently collects patient level detail on patient characteristics, diagnoses and treatments, services, and charges for each hospital inpatient stay and outpatient (ambulatory surgery, emergency department, and outpatient services) visit; and each ambulatory surgery and outpatient services visit to a hospital extension clinic and diagnostic and treatment center licensed to provide ambulatory surgery services.

In addition to examining the local resident feedback of identified health needs and concerns, Catholic Health also examined Nassau County inpatient hospital data for the last three years. Hypertension, heart disease, diabetes, cancer and mental health all correlate to Catholic Health's and St. Francis' priority areas.

[29] https://www.health.ny.gov/statistics/sparcs/

Disease of the Heart: 2018,2019,2020 - Source NYS SPARCS Data

All Malignant Cancer: 2018,2019,2020

Diabetes: 2018,2019,2020
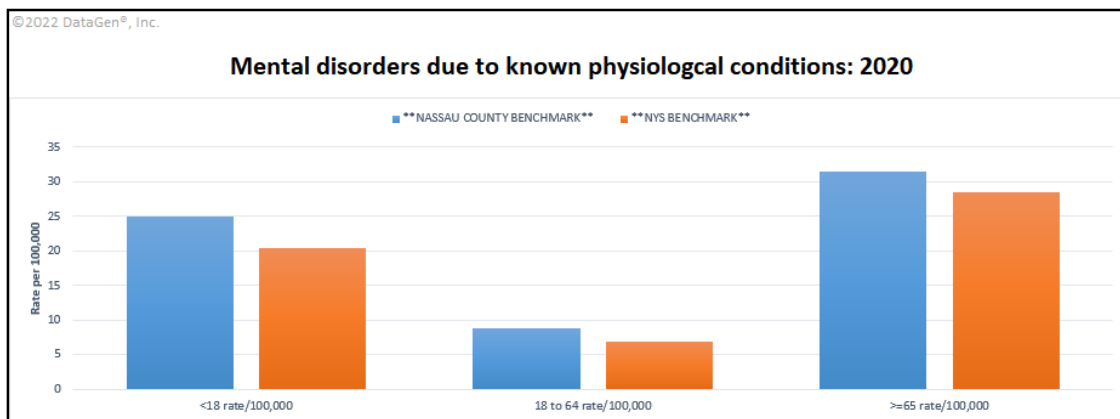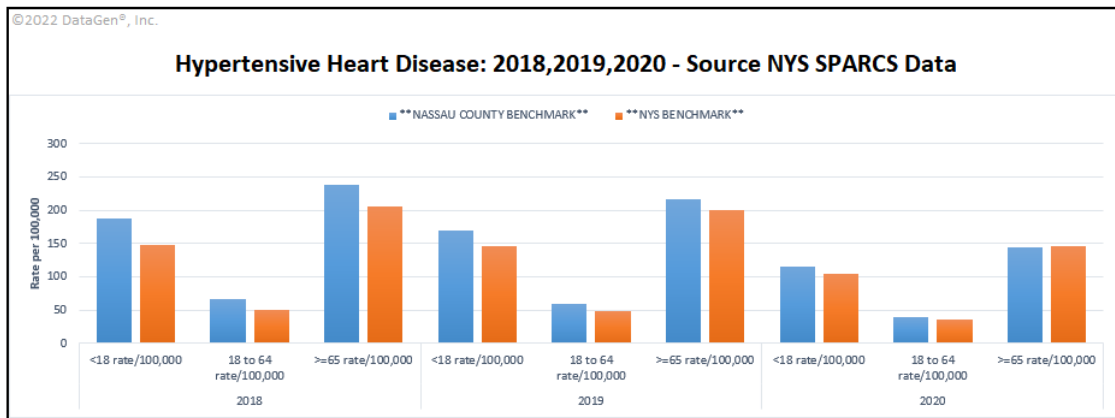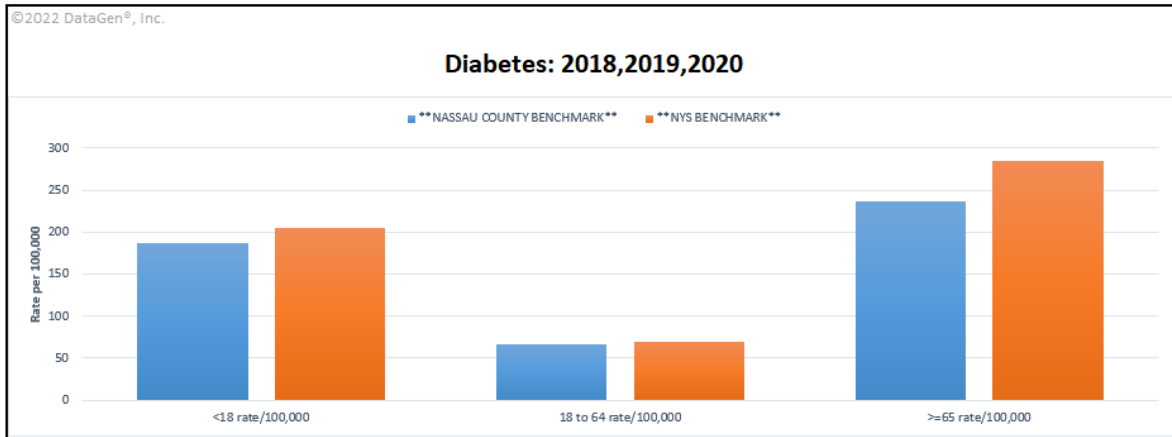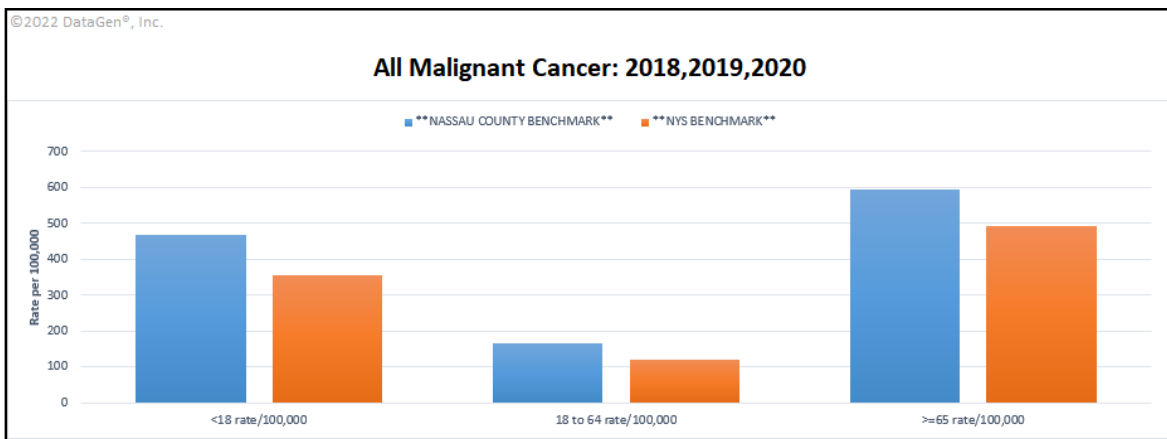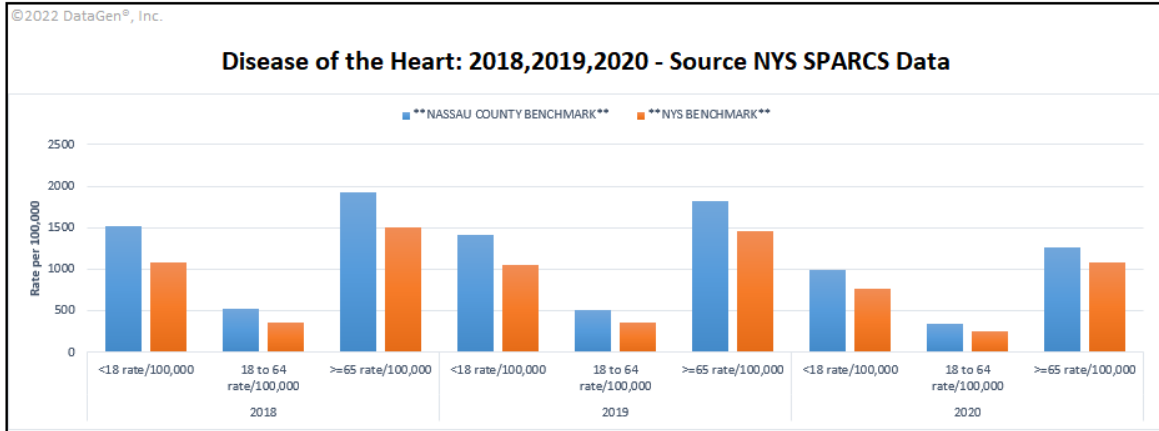
In examining hospital inpatient data for Nassau County 2018-2020, hypertension and diseases of the heart have increased over recent years validating the Community Health Assessment Survey feedback. The incidence is greatest in the 65 plus population, although some improvement was gained by 2020. The data indicates that the rate of diagnoses for mental disorders has increased in 2020 with highest incidence seen among the 65 plus population followed by the under 18 population. This last finding correlates with state and

national research identified in this report about the significant increase in mental health issues experienced by our youth.

Nassau County also fares worse for the incidence of cancer among all age groups compared to the state benchmark. Once again we see the 65 plus population is the hardest hit. The rate of diabetes seen in Nassau County is below the state benchmark. The 18 to 64 population is just about at the state benchmark, leading providers like St. Francis to be wary of increasing incidence of this disease and its complications, as residents age.

Community-based Organization Needs Assessment Analysis

What are the biggest health problems for the people/community you serve?"

2022 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Mental Health	16/25	Drugs and Alcohol Abuse	6/10
2	Drugs and Alcohol Abuse	14/25	Obesity and Weight Loss	5/10
3	Cancer	11/25	Nutrition/Eating Habits	5/10
4	Women's Health/Wellness	8/25	Mental Health	4/10
5	Care for the Elderly	8/25	Women's Health/Wellness	4/10

What would be most helpful to improve the health problems of the people/community you serve?

2022 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Mental Health Services	18/25	Access to Healthier Food Choices	7/10
2	Drug and Alcohol Services	14/25	Mental Health Services	6/10
3	Health Education Programs	14/25	Affordable Housing	6/10
4	Affordable Housing	11/25	Transportation	5/10
5	Access to Healthier Food	8/25	Health Education Programs	5/10

The results from these two particular questions reveal that CBO leaders are concerned about food access for their clients and mental health services. They also continue to see drug and alcohol abuse, mental health, and issues related to nutrition and weight loss as major health concerns for their clients.
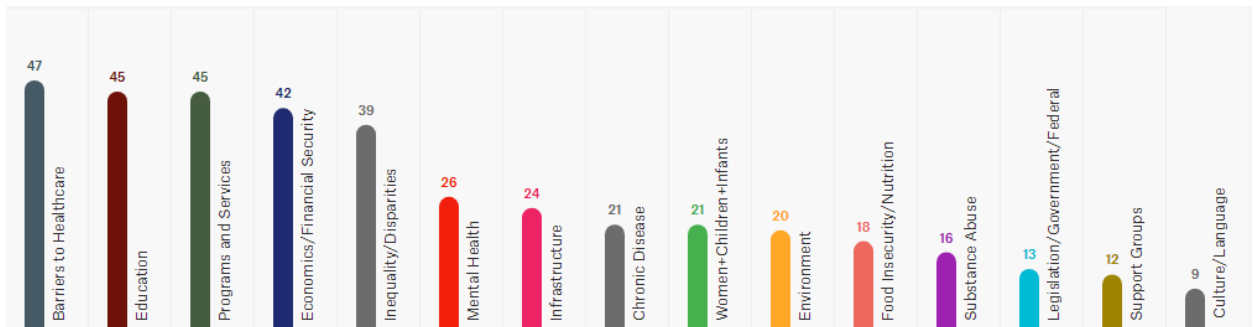
Key Informant Interview Analysis

The top three social determinant of health factors found via this analysis are education, healthcare system (in terms of access) and food. Kaiser Family Foundation Social Determinant of Health domains used as reference.[30]

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[30] https://www.kff.org/racial-equity-and-health-policy/issue-brief/beyond-health-care-the-role-of-social-

SOCIAL DETERMINANTS

- Community and Social Context — 14%
- Economic Stability — 14%
- Education — 22%
- Food — 17%
- Healthcare System — 22%
- 11%
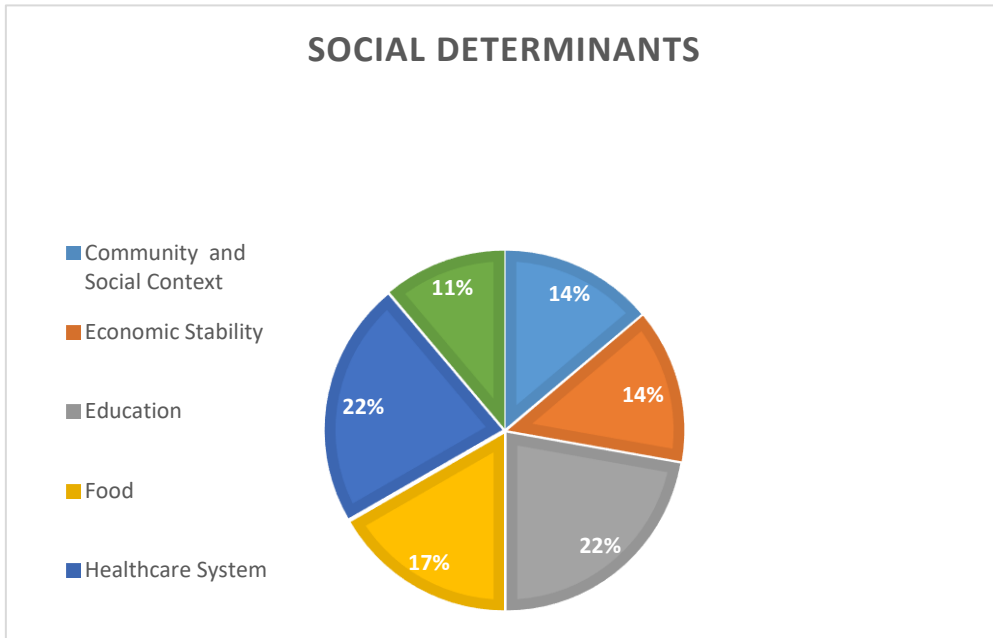
Health care access followed by education and programs/services were the top three codes that emerged from among the transcripts.

Coding Analysis

Code	Count
Barriers to Healthcare	47
Education	45
Programs and Services	45
Economics/Financial Security	42
Inequality/Disparities	39
Mental Health	26
Infrastructure	24
Chronic Disease	21
Women+Children+Infants	21
Environment	20
Food Insecurity/Nutrition	18
Substance Abuse	16
Legislation/Government/Federal	13
Support Groups	12
Culture/Language	9

determinants-in-promoting-health-and-health-equity/

Library Research Project, Qualitative Analysis

Top 5 identified health needs	Top 5 identified social needs
Mental Health	Homelessness
Exercise	Technology Literacy
Diet	ESL/LOTE
Opioid Use	Unemployment
Personal Health	Food

Library personnel at randomly selected public libraries throughout Nassau County were interviewed for this study. Mental health is the top health need identified followed by exercise and diet, two lifestyle behaviors that exert a tremendous influence on the incidence of all chronic diseases. Homelessness took the top spot among social needs, possibly because public libraries, especially in low-income, high-need communities, are a haven for the disenfranchised.

Saint Francis Hospital & Heart Center: 2021- 2022 Emergency Department Data, Top Diagnoses

Top 7 Secondary Diagnoses for ED Visits
7/1/2021-6/30/22
St. Francis Hospital
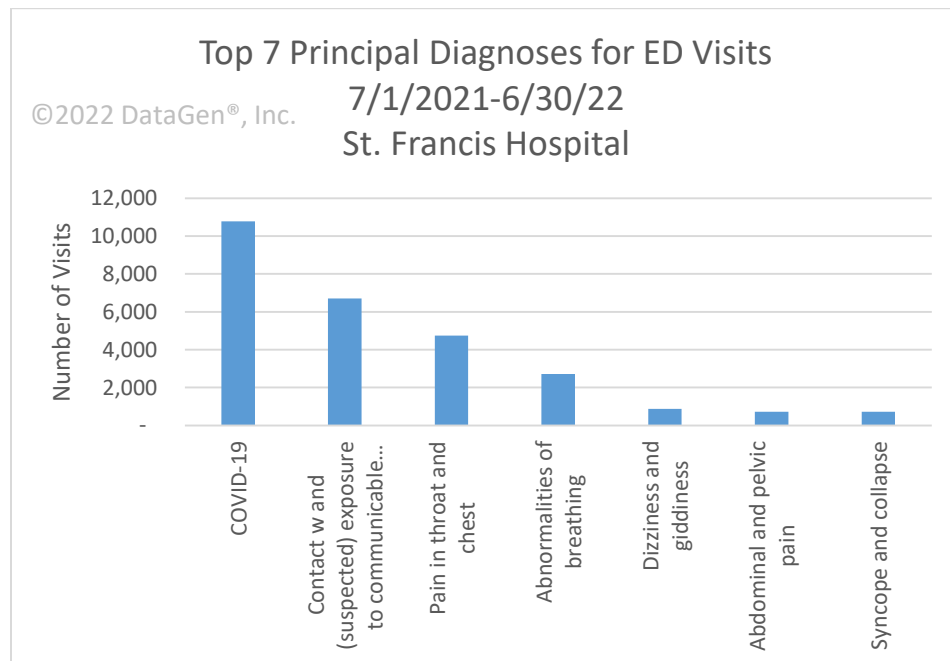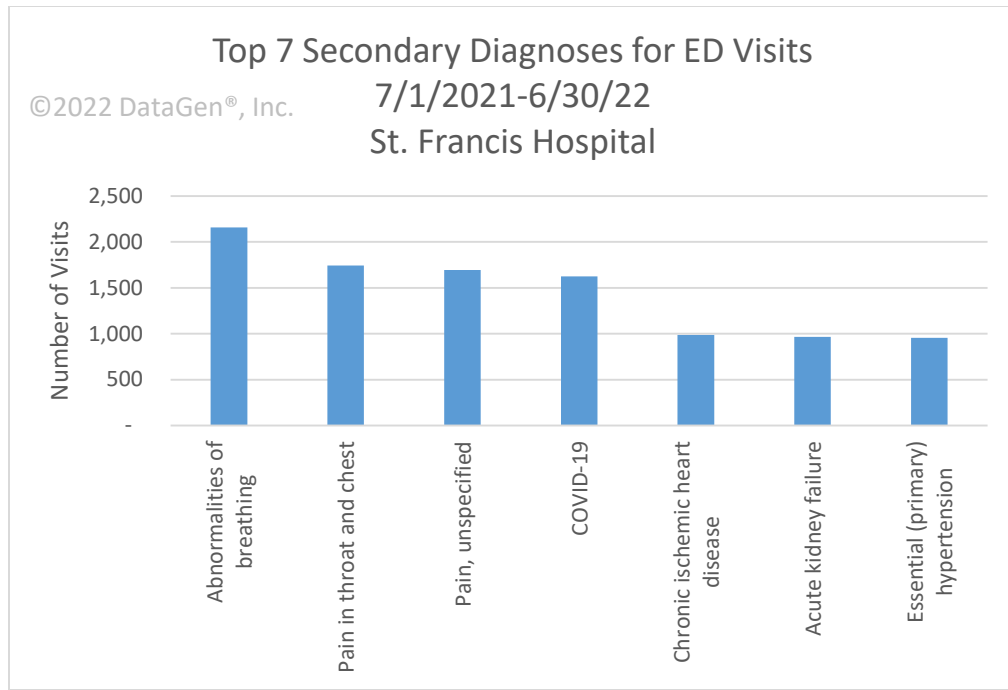
Emergency Department data for St. Francis shows over 50,000 visits from July 2021 to June 2022. Top ICD-10 diagnosis codes reveal the impact of COVID-19 on the community's health, with 10,771 visits for COVID-19 and an additional 4,700 for COVID-19 exposure.

Emergency Department Visits
7/1/2021 - 6/30/2022
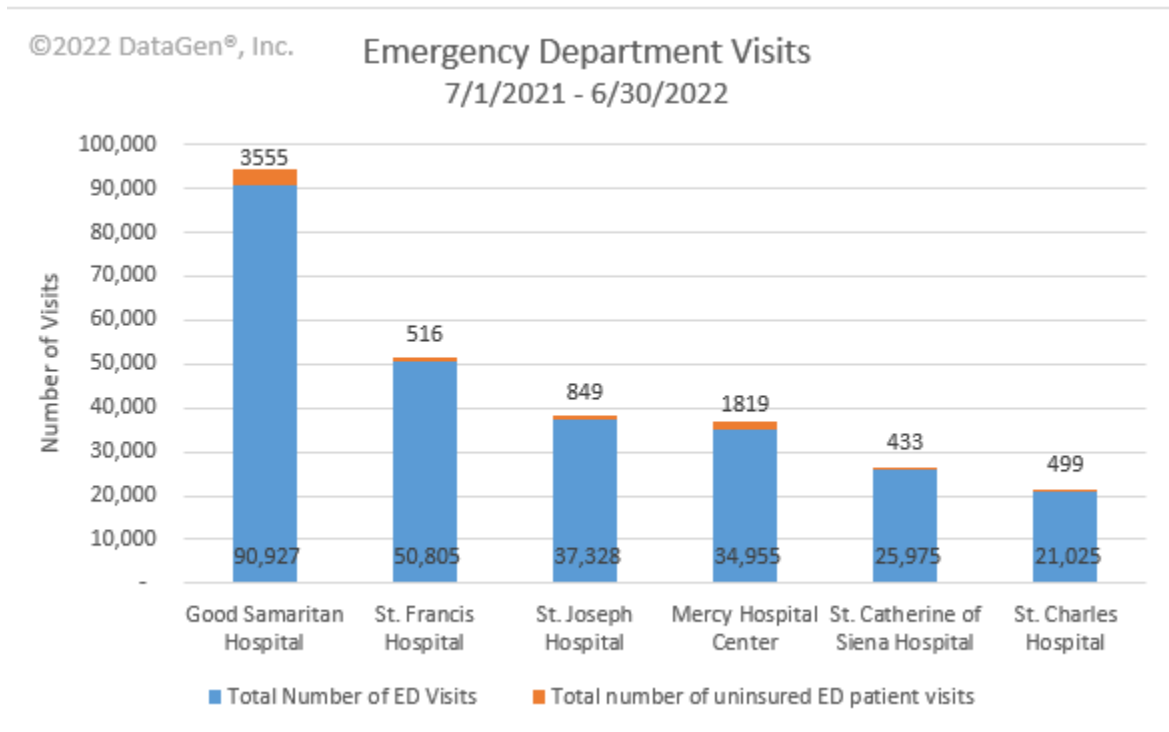
COLLABORATING PARTNERS

In addition to working directly with the Long Island Health Collaborative, St. Francis has strong relationships with local and regional community-based organizations, libraries, schools, faith-based organizations, the local health department, local fire departments and municipalities that support and partner with us to reduce chronic disease, mental health and substance misuse, and to promote health equity. See page 9 for our extensive partner list of health care and other key institutions. A shortlist of available assets and resources includes:

22 hospitals	Media partners
2 county health departments	27 state parks
110+ community-based and social service organizations	65 county parks
	9 YMCAs
111 libraries	41 farmer's markets
5 major academic institutions	100 plus food pantries
2 health plans	20 Federally Qualified Health Centers
2 school districts	

Each partner offers unique programming and interventions that align with the goals and objectives of St. Francis. These assets and resources can be mobilized and employed to address the health issues identified. See the work plan in the appendix E for a detailed description of interventions and our partners with whom we are working.

Community Service Plan and Progress Report

In support of our Community Service Plan, during the past three years, St. Francis partnered with community-based organizations in multiple communities to hold culturally relevant chronic disease management educational programs, vaccination clinics, support groups, health screenings, emotional wellbeing workshops, and lectures among other outreach activities. Due to the COVID-19 pandemic, many outreach activities traditionally held in the community were paused in March 2020 but resumed last in the fall of 2021. With lessons learned, many successful virtual education events still continue.

Mission moment highlights (*Represents community outreach activities for years 2020, 2021, and through August 2022*):

- Screenings (Outreach Bus, Health Sundays Program, Other Locations): 8,176 individuals
- Vaccination Clinics and PODS: 21,518 administered
- Community Lectures/Workshops: 427 attendees
- Weight Management Program: 2,604 attendees
- Trainings (CPR, Stop the Bleed, Narcan): 1,899 individuals trained
- Support Groups (Condition Specific): 227 attendees
- Support Groups (Behavioral Health): 879 attendees

PROPOSED INTERVENTIONS

Evidence-based interventions

St. Francis remains committed to providing the community with evidence-based and promising practice programs that address chronic diseases and mental health/substance misuse. Additionally, as a faith-based provider, it has always been our mission to address the social needs of our patients and community members. Our interventions are broad and far reaching. Refer to our work plan for specific interventions, measures, partners, goals and objectives.

Work plan

See appendix E

SUMMARY

This report is a comprehensive study of the health needs and barriers experienced by the community members served in this region. After extensive research and interaction with partners and the public, the following priorities were selected:

1. **Prevent Chronic Disease**
   Focus Area 4: Chronic Disease Preventive Care and Management

2. **Promote Well-Being and Prevent Mental and Substance Use Disorders**
   Focus Area 2: Mental and Substance Use Disorders Prevention

The public needs to understand the findings of this report and Catholic Health's vision for meeting these priorities and closing the gap in health disparities.

This report is being made available to the public and will be posted on Catholic Health's website.

ATTESTATION OF STATE AND FEDERAL REQUIREMENTS

This CHNA and resulting implementation plan meet the 501(c)(3)(r) federal requirements for conducting a CHNA and implementation plan. The regulations are part of the Affordable Care Act and became effective in 2015. The document also meets New York State guidelines for community health needs assessments and community involvement.

CONCLUSION

Catholic Health is pleased to provide this comprehensive report to community members and the wider public. It reaffirms each organization's commitment to meeting the health needs of our communities and working every day to mitigate health disparities. Targeted interventions and strategies, driven by the data outlined in this report, reflect meaningful and reasonable approaches to improving the health of our communities during the next three-year cycle, 2022 - 2024. We will report on the status of these interventions and strategies throughout the implementation period.

Long Island Health Collaborative
Community Member Survey Summary of Findings

Methodology:

Surveys were distributed by paper and electronically, through Survey Monkey, to community members. The electronic version placed rules on certain questions; for questions 1-5 an individual could select three choices, and each question was mandatory. For question 6, individuals could choose as many responses as they'd like. Although the rules were written on the paper survey, people often did not follow them. On January 25, 2022, we downloaded the surveys from Survey Monkey. Data collected includes January - December 2021. We needed to add weights to the surveys which did not follow the rules - for each of the questions that had more than three responses. The weight for each response was 3/x, where x is the count of responses. No weight was applied to questions with less than three responses because they had the option to select more and chose not to do so. With the weight determined, we applied the formula to the data and then added the remaining surveys to the spreadsheet.

Analysis Results:

1. When asked: ***What are the biggest ongoing health concerns in THE COMMUNITY WHERE YOU LIVE?***

Jan-Dec 2021 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Cancer	35.07%	Cancer	37.14%
2	Drugs & Alcohol Abuse	31.15%	Heart Disease & Stroke	34.41%
3	Mental Health Depression/Suicide	30.40%	Drugs & Alcohol Abuse	25.68%
4	Obesity/Weight Loss Issues	19.49%	Mental Health Depression/Suicide	24.70%
5	Vaccine Preventable Diseases	17.67%	Diabetes	24.02%
	Sum of Column Percentages	**133.78%**		**145.96%**

2. When asked: ***What are the biggest ongoing health concerns for YOURSELF?***

Jan-Dec 2021 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Cancer	27.70%	Heart Disease & Stroke	34.81%
2	Mental Health Depression/Suicide	25.53%	Women's Health & Wellness	34.01%
3	Heart Disease & Stroke	22.98%	Cancer	23.54%
4	Women's Health & Wellness	22.80%	Obesity/Weight Loss Issues	22.23%
5	Obesity/Weight Loss Issues	22.55%	Diabetes	20.05%
	Sum of Column Percentages	**121.55%**		**134.65%**

Jan-Dec 2021 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Fear (e.g. not ready to face/discuss health problem; immigration status)	30.76%	There are no Barriers	27.70%
2	Unable to Pay Co-pays/Deductibles	30.36%	No Insurance	26.94%
3	No Insurance	28.85%	Fear (e.g. not ready to face/discuss health problem; immigration status)	26.00%
4	Don't Understand Need to See a Doctor	25.03%	Unable to Pay Co-pays/Deductibles	23.42%
5	There are no Barriers	16.81%	Transportation	13.32%
	Sum of Column Percentages	**131.81%**		**117.37%**

3. When asked: ***What prevents you and your family from getting medical treatment?***

4. When asked: ***Which is MOST needed to improve the health of your community?***

Jan-Dec 2021 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Mental Health Services	33.58%	Mental Health Services	32.78%
2	Healthier Food Choices	28.67%	Clean Air & Water	30.53%
3	Clean Air & Water	23.37%	Healthier Food Choices	29.64%
4	Drug & Alcohol Rehabilitation Services	22.32%	Drug & Alcohol Rehabilitation Services	22.03%
5	Job Opportunities	17.30%	Job Opportunities	18.38%
	Sum of Column Percentages	**125.24%**		**133.36%**

5. When asked: ***What health screenings or education/information services are needed in your community?***

Jan-Dec 2021 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Mental Health/Depression	23.83%	Blood Pressure	24.31%
2	Cancer	21.01%	Mental Health/Depression	22.81%
3	Drug & Alcohol	17.42%	Cholesterol	20.62%
4	Importance of Routine Well Check Ups	16.58%	Cancer	17.66%
5	Blood Pressure	15.07%	Importance of Routine Well Check Ups	16.12%
	Sum of Column Percentages	**93.90%**		**101.52%**

6. Finally, when asked: ***Where do you and your family get most of your health information?***

Jan-Dec 2021 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Doctor/Health Professional	84.71%	Doctor/Health Professional	80.75%
2	Family or Friends	35.90%	Internet	40.85%
3	Internet	32.39%	Family or Friends	30.52%
4	Social Media (Facebook, Twitter, etc.)	20.72%	Television	20.66%
5	Television	18.35%	Newspaper/Magazines	19.72%
	Sum of Column Percentages	**192.07%**		**192.49%**

1143 surveys were collected between January 1st and December 31st, 2021. There were 213 respondents for Nassau, 883 for Suffolk.

For a full version of the spreadsheet that includes interactive tables to analyze results based on demographic factors you can visit: https://www.lihealthcollab.org/data-resources.aspx

About the Long Island Health Collaborative

The Long Island Health Collaborative is a partnership of Long Island's hospitals, county health departments, physicians, health providers, community-based health and social service organizations, human service organizations, academic institutions, health plans, local government, and the business sector, all engaged in improving the health of Long Islanders. The initiatives of the LIHC are overseen by the Nassau-Suffolk Hospital Council.

LONG ISLAND COMMUNITY HEALTH ASSESSMENT SURVEY

Your opinion is important to us!

The purpose of this survey is to get your opinion about health issues that are important in your community. Together, the County Departments of Health and hospitals throughout Long Island will use the results of this survey and other information to help target health programs in your community. Please complete only one survey per adult 18 years or older. Your survey responses are anonymous. Thank you for your participation.

1. What are the biggest ongoing health concerns in <u>THE COMMUNITY WHERE YOU LIVE</u>? (Please check up to 3)

- ☐ Asthma/lung disease
- ☐ Cancer
- ☐ Child health & wellness
- ☐ Diabetes
- ☐ Drugs & alcohol abuse
- ☐ Environmental hazards

- ☐ Heart disease & stroke
- ☐ HIV/AIDS & Sexually Transmitted Diseases (STDs)
- ☐ Mental health depression/suicide
- ☐ Obesity/weight loss issues

- ☐ Safety
- ☐ Vaccine preventable diseases
- ☐ Women's health & wellness
- ☐ Other (please specify)
  _____

2. What are the biggest ongoing health concerns for <u>YOURSELF</u>? (Please check up to 3)

- ☐ Asthma/lung disease
- ☐ Cancer
- ☐ Child health & wellness
- ☐ Diabetes
- ☐ Drugs & alcohol abuse
- ☐ Environmental hazards

- ☐ Heart disease & stroke
- ☐ HIV/AIDS & Sexually Transmitted Diseases (STDs)
- ☐ Mental health depression/suicide
- ☐ Obesity/weight loss issues

- ☐ Safety
- ☐ Vaccine preventable diseases
- ☐ Women's health & wellness
- ☐ Other (please specify)
  _____

3. What prevents you and your family from getting medical treatment? (Please check up to 3)

- ☐ Cultural/religious beliefs
- ☐ Don't know how to find doctors
- ☐ Don't understand need to see a doctor
- ☐ Fear (e.g. not ready to face/discuss health problem; immigration status)

- ☐ Lack of availability of doctors
- ☐ Language barriers
- ☐ No insurance
- ☐ Transportation

- ☐ Unable to pay co-pays/deductibles
- ☐ There are no barriers
- ☐ Other (please specify)
  _____

4. Which of the following is MOST needed to improve the health of your community? (Please check up to 3)

- ☐ Clean air & water
- ☐ Drug & alcohol rehabilitation services
- ☐ Healthier food choices
- ☐ Job opportunities
- ☐ Safe worksites

- ☐ Mental health services
- ☐ Recreation facilities
- ☐ Safe childcare options
- ☐ Safe places to walk/play

- ☐ Smoking cessation programs
- ☐ Transportation
- ☐ Weight loss programs
- ☐ Other (please specify)
  _____

5. What health screenings or education/information services are needed in your community? (Please check up to 3)

- ☐ Blood pressure
- ☐ Cancer
- ☐ Cholesterol
- ☐ Dental screenings
- ☐ Diabetes
- ☐ Disease outbreak information
- ☐ Drug and alcohol

- ☐ Eating disorders
- ☐ Emergency preparedness
- ☐ Exercise/physical activity
- ☐ Heart disease
- ☐ HIV/AIDS & Sexually Transmitted Diseases (STDs)
- ☐ Importance of routine well checkups

- ☐ Mental health/depression
- ☐ Nutrition
- ☐ Prenatal care
- ☐ Suicide prevention
- ☐ Vaccination/immunizations
- ☐ Other (please specify)
  _____

6. Where do you and your family get most of your health information? (Check all that apply)

- ☐ Doctor/health professional
- ☐ Family or friends
- ☐ Health Department
- ☐ Hospital
- ☐ Internet

- ☐ Library
- ☐ Newspaper/magazines
- ☐ Radio
- ☐ Religious organization
- ☐ School/college

- ☐ Social Media (Facebook, Twitter, etc.)
- ☐ Television
- ☐ Worksite
- ☐ Other (please specify)

_____

For statistical purposes only, please complete the following:

I identify as:　　　　　☐ Male　　　☐ Female　　　☐ Other

What is your age? _____

ZIP code where you live: _____　　**Town where you live**: _____

What race do you consider yourself?

- ☐ White/Caucasian
- ☐ Black/African American

- ☐ Native American
- ☐ Asian/Pacific Islander

- ☐ Multi-racial
- ☐ Other (please specify)

_____

Are you Hispanic or Latino?　　　☐ Yes　　　　　☐ No

What language do you speak when you are at home (select all that apply)

- ☐ English
- ☐ Chinese

- ☐ Portuguese
- ☐ Korean

- ☐ Spanish
- ☐ Hindi

- ☐ Italian
- ☐ Haitian Creole

- ☐ Farsi
- ☐ French Creole

- ☐ Polish
- ☐ Other

What is your annual <u>household</u> income from all sources?

- ☐ $0-$19,999
- ☐ $50,000 to $74,999

- ☐ $20,000 to $34,999
- ☐ $75,000 to $125,000

- ☐ $35,000 to $49,999
- ☐ Over $125,000

What is your highest level of education?

- ☐ K-8 grade
- ☐ Some high school
- ☐ High school graduate

- ☐ Technical school
- ☐ Some college
- ☐ College graduate

- ☐ Graduate school
- ☐ Doctorate
- ☐ Other (please specify)

_____

What is your current employment status?

- ☐ Employed for wages
- ☐ Student
- ☐ Military

- ☐ Self-employed
- ☐ Retired

- ☐ Out of work and looking for work
- ☐ Out of work, but not currently looking

Do you currently have health insurance?　☐ Yes　　　☐ No　　　☐ No, but I did in the past

What type of insurance do you have? (select all that apply)

- ☐ Medicaid　　　　　☐ Medicare　　　　　☐ Private/Commercial　　　　　☐ No Insurance

Do you have access to reliable internet in your home?　☐ Yes　　　☐ No

If you have health concerns or difficulty accessing care, please call the Long Island Health Collaborative for available resources at: **631-963-4767.**	Please return this completed survey to: LIHC Nassau-Suffolk Hospital Council 1383 Veterans Memorial Highway, Suite 26 Hauppauge, NY 11788 Or you may fax completed survey to 631-716-6920	All non-profit hospitals on Long Island offer financial assistance for emergency and medically necessary care to individuals who are unable to pay for all or a portion of their care. To obtain information on financial assistance offered at each Long Island hospital, please visit the individual hospital's website.

Long Island Health Collaborative
CBO Survey Summary of Findings

Methodology:

Surveys were distributed electronically via Survey Monkey to community-based organization leaders. Data was collected December 1st 2021 - January 15th 2022. Survey responses were downloaded from Survey Monkey on March 12th, 2022. For questions prompting a maximum of five choices, the first five selected are included in the analysis. For the open-ended question "6", key words/codes were selected, entered in the Excel search function and resulted in a tally for number of times they appeared in the responses. This method revealed top three key themes. 44 surveys were collected; 25 for Suffolk County, 10 for Nassau County and 9 with no location specified.

Analysis Results:

1. When asked "***What are the biggest health problems for the people/community you serve?"*** (Maximum of 5 choices):

2022 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Mental Health	16/25	Drugs and Alcohol Abuse	6/10
2	Drugs and Alcohol Abuse	14/25	Obesity and Weight Loss	5/10
3	Cancer	11/25	Nutrition/Eating Habits	5/10
4	Women's Health/Wellness	8/25	Mental Health	4/10
5	Care for the Elderly	8/25	Women's Health/Wellness	4/10

2. When asked "***What would be most helpful to improve the health problems of the people/community you serve?"*** (Maximum of 5 choices)*:*

2022 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Mental Health Services	18/25	Access to Healthier Food Choices	7/10
2	Drug and Alcohol Services	14/25	Mental Health Services	6/10
3	Health Education Programs	14/25	Affordable Housing	6/10
4	Affordable Housing	11/25	Transportation	5/10
5	Access to Healthier Food	8/25	Health Education Programs	5/10

3.   When asked **"Do any people/communities you serve in Suffolk have problems getting needed health care? If yes, what do you think the reasons are?"** *For Suffolk, 14 out of 25 answered "Yes" and the remainder answered "No". For Nassau, 7 out of 10 answered "Yes" and the remainder answered "No"* (Maximum of 5 choices).*:*

2022 Rank				
	Suffolk County	**Percentage**	**Nassau County**	**Percentage**
1	No Insurance/Unable to Pay for Healthcare	13/14	Misinformation/Health Illiteracy	6/7
2	Misinformation/Health Illiteracy	10/14	Transportation	5/7
3	Language Barriers	8/14	No Insurance/Unable to Pay for Healthcare	5/7
4	Transportation	7/14	Language Barriers	5/7
5	Unable to Pay Copays/Deductibles	7/14	Fear/Hesitancy	4/7

4.   When asked **"What health issues do the people/community you serve need education about?"** (Maximum of 5):

2022 Rank				
	Suffolk County	**Percentage**	**Nassau County**	**Percentage**
1	Mental Health/Depression	15/25	Chronic Disease Management	7/10
2	Substance Misuse	11/25	Blood Pressure	6/10
3	Blood Pressure	11/25	Mental Health/Depression	5/10
4	Chronic Disease Management	9/25	Food Security	4/10
5	Suicide Prevention	7/25	Exercise/Physical Activity	3/10

5.   When asked *"Where do the people/community you serve get most of their health information?"*

2022 Rank				
	Suffolk County	**Percentage**	**Nassau County**	**Percentage**
1	Family or Friends	22/25	Family or Friends	9/10
2	Internet	20/25	Internet	8/10
3	Facebook/Twitter	16/25	Church Group	8/10
4	Doctor/Healthcare Provider	16/25	Doctor/Healthcare Provider	5/10
5	Television	15/25	Facebook/Twitter	4/10

6. When asked *"What do you think makes a community healthy?"* (Open ended; summarized below).

"Access", "Communication" and "Education" were the three most common themes for both the Nassau and Suffolk respondents. Access to healthcare (such as health insurance and transportation), communication (such as doctor-patient relationships and more community programs) and more available online resources to educate oneself and improve health literacy were the most pressing matters to responders.

7. When asked *"How would you rate the health of the people/community you serve?"*:

2022 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Somewhat Healthy	12/25	Somewhat Healthy	8/10
2	Healthy	7/25	Unhealthy	2/10
3	Unhealthy	3/25	Healthy	0/10
4	Very Unhealthy	3/25	Very Unhealthy	0/10

8. When asked *"What types of health screenings and/or services are needed to keep people healthy in the community you serve?"* (Maximum of 5 choices):

2022 Rank	Suffolk County	Percentage	Nassau County	Percentage
1	Mental Health/Depression	12/25	Blood Pressure	8/10
2	Substance Misuse	9/25	Chronic Disease Management	8/10
3	Eating Disorders	8/25	Mental Health/Depression	6/10
4	Chronic Disease Management	7/25	Exercise/Physical Activity	5/10
5	Suicide Prevention	7/25	Heart Disease	4/10

About the Long Island Health Collaborative

The Long Island Health Collaborative is a partnership of Long Island's hospitals, county health departments, physicians, health providers, community-based health and social service organizations, human service organizations, academic institutions, health plans, local government, and the business sector, all engaged in improving the health of Long Islanders. The initiatives of the LIHC are overseen by the Nassau-Suffolk Hospital Council.

Long Island Health Collaborative | 1383 Veterans Memorial Highway, Suite 26, Hauppauge, NY 11788

www.lihealthcollab.org | info@lihealthcollab.org | (631) 257 - 6964

HEALTH SURVEY FOR ORGANIZATIONS AND AGENCIES

The county health departments (Nassau and Suffolk), local hospitals, and other community partners are in the process of deciding what health problems we will focus on for the next few years. We would like to find out **what problems are vital to the persons and community you provide care/services to**. We will use these results, along with other information, to plan to improve the health of persons in Nassau and Suffolk counties. Please give us your input by filling this out and sending it back by mail or email. **Or, complete the survey online (preferred method) through this link (insert link).** The return information is listed at the end of this survey. Thank you.

1. What are the biggest health problems for the people/community you serve? (Please check up to 5)

- [ ] Access to vaccinations
- [ ] Asthma/lung disease
- [ ] Cancer
- [ ] Care for the elderly
- [ ] Child health & wellness
- [ ] Memory loss
- [ ] Diabetes
- [ ] Drugs & alcohol abuse
- [ ] Environmental problems (water, pollution, air, etc.)
- [ ] Falls in the elderly
- [ ] Heart disease & stroke

- [ ] HIV/AIDS & Sexually Transmitted Diseases (STDs)
- [ ] Infections
- [ ] Preventable Injuries
  - [ ] Car crashes
  - [ ] Pedestrian injuries
  - [ ] Other: _____
- [ ] Mental health (including depression & suicide)
- [ ] Nutrition / eating habits
- [ ] Obesity/weight loss issues
- [ ] Premature births

- [ ] Smoking/Tobacco use
- [ ] Teen pregnancy
- [ ] Violence
  - [ ] In the home or between partners
  - [ ] Guns
  - [ ] Murders
  - [ ] Rape
  - [ ] Other: _____
- [ ] Women's health & wellness
- [ ] Other: _____

2. What would be most helpful to improve the health problems of the people/community you serve? (Please check up to 5)

- [ ] Access to healthier food
- [ ] Affordable housing
- [ ] Better schools
- [ ] Breastfeeding
- [ ] Clean air & water
- [ ] Drug & alcohol services
- [ ] More grocery stores
  - [ ] Farmers markets

- [ ] Health education programs
- [ ] Health screenings
- [ ] Home care options
- [ ] Insurance enrollment programs
- [ ] Job opportunities
- [ ] Mental health services
- [ ] Parks and recreation
- [ ] Safer childcare options

- [ ] Safer places to walk/play
- [ ] Safer work place
- [ ] Transportation
- [ ] Weight loss programs
- [ ] Other (please specify)

_____

3. Do any people/communities you serve have problems getting needed health care?

- [ ] Yes (if 'yes', please answer question #4)   - [ ] No

4. If you answered 'yes' to question #3, what do you think the reasons are? (Please check up to 5)

- [ ] Cultural/religious beliefs
- [ ] Don't know how to find doctors
- [ ] Don't understand need to see a doctor
- [ ] Fear (e.g. not ready to face/discuss health problem)

- [ ] Lack of availability of doctors
- [ ] Language barriers
- [ ] No insurance and unable to pay for the care
- [ ] Transportation

- [ ] Unable to pay co-pays/deductibles
- [ ] Other (please specify)

_____

5. What types of health screenings and/or services are needed to keep people healthy in the community you provide care to? (Check up to 5)

- [ ] Blood pressure
- [ ] Cancer
- [ ] Cholesterol (fats in the blood)
- [ ] Dental screenings
- [ ] Diabetes
- [ ] Disease outbreak prevention
- [ ] Drug and alcohol
- [ ] Eating disorders

- [ ] Emergency preparedness
- [ ] Exercise/physical activity
- [ ] Falls prevention in the elderly
- [ ] Heart disease
- [ ] HIV/AIDS & STDs
- [ ] Routine well checkups
- [ ] Memory loss
- [ ] Mental health/depression

- [ ] Nutrition
- [ ] Prenatal care
- [ ] Quitting smoking
- [ ] Suicide prevention
- [ ] Vaccination/immunizations
- [ ] Weight loss help
- [ ] Other (please specify)

_____

6. What health issues do the people/community you provide care need education about? (Please check up to 5)

- ☐ Blood pressure
- ☐ Cancer
- ☐ Cholesterol
- ☐ Dental screenings
- ☐ Diabetes
- ☐ Disease outbreak prevention
- ☐ Drug and alcohol

- ☐ Eating disorders
- ☐ Emergency preparedness
- ☐ Exercise/physical activity
- ☐ Falls prevention in the elderly
- ☐ Heart disease
- ☐ HIV/AIDS & STDs
- ☐ Routine well checkups

- ☐ Mental health/depression
- ☐ Nutrition
- ☐ Prenatal care
- ☐ Suicide prevention
- ☐ Vaccination/immunizations
- ☐ Quit smoking
- ☐ Other (please specify)

7. Where do the people/community you provide care to get most of their health information? (Check all that apply)

- ☐ Doctor/health care provider
- ☐ Facebook or twitter
- ☐ Family or friends
- ☐ Health Department
- ☐ Hospital
- ☐ Internet

- ☐ Library
- ☐ Newspaper/magazines
- ☐ Other social media
- ☐ Radio
- ☐ Church group
- ☐ School or college

- ☐ TV
- ☐ Worksite
- ☐ Other (please specify)

  _____

8. **What do you think makes a community healthy?** _____

9. **How would you rate the health of the people/community you provide care to?**

☐ Very healthy   ☐ Healthy   ☐ Somewhat healthy   ☐Unhealthy   ☐Very unhealthy

---

If you are able, please complete the following:

Your organization:_____   How old are you? :_____
Where did you receive this survey: _____   ZIP code or Town where you work: _____
What is your sex: ☐ Male   ☐ Female

Are you Hispanic or Latino?   ☐ Yes   ☐ No

What race do you consider yourself?
- ☐ White
- ☐ Black/African American
- ☐ Asian/Pacific Islander
- ☐ Native American
- ☐ Other (please specify) _____

What is the highest grade you finished?
- ☐ 8th grade or less
- ☐ Some high school
- ☐ High school graduate
- ☐ Technical school
- ☐ Some college
- ☐ College graduate
- ☐ Graduate school
- ☐ Doctorate
- ☐ Other (please specify) _____

Your name: _____
Phone #:_____   Your email address: _____

Can we contact you so you can tell us more of your ideas regarding health problems in Nassau and Suffolk counties and what should be done about them?
      ☐ Yes   ☐ No

Email to info@lihc.org or mail to**:**
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Qualitative Research Analysis of Key Informant Interviews Conducted Among Community-Based Organizations on Long Island

Presented May 3, 2022

EXECUTIVE SUMMARY

The Long Island Health Collaborative (LIHC) is a partnership of Long Island's hospitals, county health departments, health providers, community-based social and human service organizations, academic institutions, health plans, local government, and the business sector, all engaged in improving the health of Long Islanders. Collaborative members are committed to improving the health of people living with chronic disease, obesity, and behavioral health conditions in Nassau and Suffolk counties.

The LIHC assists its members with their Community Health Needs Assessment by providing data for members to use in their final CHNA reports. Members are charged with this task by both the federal and state government, and they are required to obtain feedback from community-based organizations (CBOs) during the CHNA process. The LIHC performed the following to gain feedback from CBOs.

METHODOLOGY

A purposeful sampling procedure was initiated: a form of non-probability sampling in which the researcher relies on their own discretion to choose variables for the sample population, deliberately selecting participants who have information in the phenomena being studied. As a first step, surveys were sent to 400+ community-based organization leaders, which yielded quantitative results about their observed health needs and barriers among the populations they serve. One question on this survey asked the CBO leaders if they would be interested in further discussion. 23 informants expressed interest in being interviewed and were contacted for further discussion. Consistent outreach (first two email correspondences,

then one phone call) and follow-through yielded 12 informants who were able to fully proceed to the interview stage. The interviews were conducted between February 23rd, 2022 and March 4th, 2022.

The interviews were conducted and recorded via Zoom with two different interviewers, reading from an interview instrument with five questions (Appendix A). Two of the five questions were closed-ended, and prior to the qualitative analysis, these two questions were analyzed separately. One asked about New York State Prevention Agenda topics, and the other asked about the most pressing social determinant of health needs (Appendix B). Audio recordings were transcribed and uploaded to Atlas TI Web software for analysis with interviewee permission. Participation in the interview was voluntary, with both interviewee identity and responses kept confidential.

The first necessary step of the data analysis was becoming informed on the history and goals of the Long Island Health Collaborative and the purpose of the Community Health Needs Assessment: to determine the health needs and barriers affecting Long Islanders at the individual and community level.

The interviews were revisited, reread and open-coded with a wide net. Atlast TI version 22 web-based software was used for the qualitative analysis. The variety in backgrounds and expertise of the key informants permitted an expansive open-coding format such as social interactions, personal accounts of the key informant's healthcare experiences on Long Island, the essential tasks and services their organizations provide, their thoughts on what are the most pressing health issues affecting Long Island's populace, and more were coded. The

interview instrument invited open-ended responses yet still kept the topic of discussion

narrowly focused on Long Island's systemic health needs. These codes were then parsed

through and related back to the interview transcripts, and several concepts reappeared

frequently under these wide-ranging codes. These included economics, healthcare service

infrastructure, burden of disease and systemic inequality. These frequent concepts shared a

near identical level of abstraction yet remained exclusive enough in identity to be categorized

separately and were then drafted as some of the initial focused codes. Open codes were read

again alongside the interview transcripts to see if additional categories could be drafted,

rearing a total of 15 categories to be established as the focused codes. The interviews were

reread and aptly recoded with these 15 focused codes.

Borrowing classification schemes wholesale from external sources risks funneling the

data through a biased filter, muddying levels of abstraction and running risk of trivializing

crucial data points. The researcher defined the focused coding list and their meanings but still

respected the Kaiser Family Foundation Social Determinants of Health (Merriam & Tisdell, 212).

This was also the case for the five priorities identified in the New York State Prevention Agenda.

The focused codes aimed to encompass the entirety of the interview data featured, defined

with apt exclusivity so several codes handled similar but not identical data points (Merriam &

Tisdell, 213).

Across all 12 transcripts, the interviewees shared their professional background,

organizational goals, social determinants and health issues most affecting Long Island and the

communities they serve, along with personal stories on healthcare issues affecting their

constituents. The process of establishing the focused codes was a gradient of transition from

inductive to deductive analysis, best defined as "grounded theory." The process opened

inductively, reading the transcripts and deriving tentative codes, then continuing to read

additional transcripts and noting whether these early codes remained applicable. Proceeding

through the data revealed some earlier codes to be of low value while others were only

strengthened, and the latter half of the analysis process transitioned to a deductive stance of

seeking data that supported the finalized set of codes. Viewing the transcripts through this

complete set of parameters yielded several critical themes.

KEY FINDINGS

Despite the key informants hailing from a variety of different yet highly specialized

education, expertise, and management experience, several common themes were drawn

between all 12 transcripts (with the interviewees remaining anonymous).

Barriers to healthcare

Acknowledging and tackling barriers to healthcare was the strongest sentiment

presented between the 12 transcripts. Health insurance tied to employment status or poor

insurance options was the most outstanding healthcare access issue: many without insurance

do not approach medical health services due to fear of extensive burden of costs, and many

programs are trying to alleviate or outright eliminate this issue:

> *"A lot of people end up in emergency rooms because they don't have primary care; they don't have access so they end up with a bill that they can't pay so we work with them to negotiate with the hospitals and advocate for them to expunge bills."*

Consistent marketing and outreach by healthcare services was also highlighted as being

vital:

"I think that is the best strategy that I have is just keep on connecting and reaching out to everyone letting them know that we're here. Let's work it out. Let's find out what we can do what people would like to see, what people need to see."

Financial Insecurity

Rising costs of living put enormous pressure on Long Island's residents. Several informants have lamented the United States healthcare system and that many of the systemic issues start at the very top:

"A fragmentation of funding for public health […] and the barriers it creates to accessing whole care for individuals beyond demographics and beyond disease conditions, all of that is coming from our healthcare system that is broken. It is a barrier written, it is money driven exclusively if people are willing to admit it or not, that's the underlying realities."

There is still both respect and a need for local, smaller-scale community programs and services, but many of these are seen as effectively Band-Aid fixes that are not tackling the issue of a healthcare system that is driven to maintain a reasonable profit margin at the absolute top level. In addition, wages are not keeping up with the costs of living:

"It's not true that people can live on $15 an hour, I mean let's just get right down to the basics […] but if we look at the poverty uptick in Nassau County you know that the percentage of poverty in Nassau County is through the roof."

An informant expressed that financial insecurity can be a permanent stressor and stress itself can yield physical health consequences in line with chronic disease. Stress can also cause mental health issues, demonstrating how several of these shared themes throughout the interviews can be interconnected:

"And in order to prevent cancer, you have to de-stress because yes stress is cancer causing, and it is a silent killer. So, and stress, little break you down mentally, so I think if you address those issues and find ways to, guess, alleviate. […] Here in Suffolk County, most people have to work two to three jobs."

Education

Education was a critical discussion point, with virtually all key informants cementing it as an absolute necessity. Multiple facets of education were strongly emphasized, including completion of K through 12, college education, vocational training and increased health and healthcare literacy:

"I think that on all levels, both adult education and traditional K through 12 education is the key to both a community's survival and personal success."

Creation of free and affordable programs that facilitate active learning and personal growth beyond a classroom was also emphasized, such as a six-week cooking and nutritional education program:

"Being able to consistently have healthy food, cook it and compare it. Vegetables and fruits are foreign to them. Touch base on all these components and additional nutrition education."

Education leads to self-empowerment, which leads to making more informed choices and then proceeds to greater stability and income:

"…she's able to get a job or to go for training, education or some skill to become more independent and more stable. That would be one prong of the fork."

Mental Health

Multiple key informants expressed large concern with tackling the stigma of mental health and providing better access to mental health services. Despite the difficulty the COVID-19 pandemic caused every individual, it did provide greater clairvoyance on the societal issues of mental health stigma and perhaps provided a cultural shift towards lessening it:

> *"And it's just that stigma that you need mental health care. However, when we move from that stigma and just say, you know, any small problem that you think you need to express your thoughts about and that we can listen, and perhaps together we can find a pathway to clear that."*

> *"People's mental health needs to be supported and they need a helping hand. Tearing away at the stigma of mental health."*

The link between mental health issues and substance abuse and how they cyclically fuel each other was also a discussion point:

> *"And, you know, mental health, obviously substance use goes hand in hand, many times obviously people are using substances to mask the symptoms and the pain of the mental health issues."*

CONCLUSION

The key informants shared their expertise, personal histories and what social determinants of health are currently most important on Long Island's healthcare landscape. The categorized codes were analyzed both on an individual level and across all collective interviews and yielded a narrative of rising economic pressure, infrastructure barriers to healthcare, a necessity in funding mental health awareness and a need to increase education endeavors at all levels. This analysis provided strong evidence that the themes of mental

health, education, economics, and barriers to healthcare most affect CBO leaders and the populations they serve. The primary domains and sub-domains uncovered through this inductive and deductive reasoning process provide a deeper understanding of the healthcare issues and barriers faced. The findings primarily align with results from the CBO quantitative assessment that asked closed-ended questions, and the Community Health Assessment Survey distributed to individuals. That survey sought to uncover individuals' perceptions about barriers to care and health concerns for themselves and their communities.

AUTHORS AND RESEARCHERS

Michael Pape, Masters in Public Health Student, Stony Brook University Program in Public Health performed the qualitative analysis and wrote this report to fulfill his degree's practicum requirement.

Janine Logan, MS, APR, Vice President, Communications and Population Health; and Brooke Oliveri, Manager of Communications, Health Outreach, and Research—both principals of the Long Island Health Collaborative— conducted the interviews and designed the study.

APPENDIX A - INTERVIEW INSTRUMENT

1. Please describe your organization?
   a. Describe your role in the organization
   b. What specific services does your organization provide?
   c. Who is the target population?
   d. Describe services your organization provides to minority populations
   e. …to low-income
   f. …to uninsured
   g. …to other specific populations?

2. Many factors affect the health care community members receive. Of the Kaiser Family Foundation Social Determinants of Health, which 3 most affect the healthcare of the community members you serve?

3. Please elaborate on why you chose those three determinants, and elaborate on how they affect the community you serve.

4. Of the three social determinants you identified, which are essentially barriers to care, what strategies do you recommend for overcoming these barriers?

5. The current New York State Department of Health Prevention Agenda has identified 5 health issues to address. Please choose your top 2 priorities for the community you serve.

APPENDIX B

SOCIAL DETERMINANTS

- ■ Community and Social Context
- ■ Economic Stability
- ■ Education
- ■ Food
- ■ Healthcare System
- ■ Neighborhood and Physical Environment

Community and Social Context: 14%
Economic Stability: 14%
Education: 22%
Food: 17%
Healthcare System: 22%
Neighborhood and Physical Environment: 11%
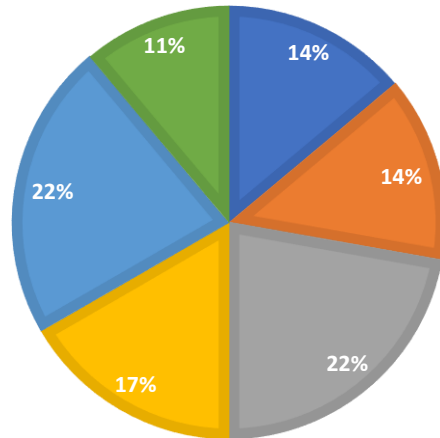
PRIORITIES

- ■ Prevent Chronic Disease
- ■ Prevent Communicable Diseases
- ■ Promote a Healthy and Safe Environment
- ■ Promote Healthy Women, Infants and Children
- ■ Promote Well-Being and Prevent Mental and Substance Use Disorders

Prevent Chronic Disease: 25%
Prevent Communicable Diseases: 17%
Promote a Healthy and Safe Environment: 12%
Promote Healthy Women, Infants and Children: 21%
Promote Well-Being and Prevent Mental and Substance Use Disorders: 25%

CODES

Published by the Long Island Health Collaborative
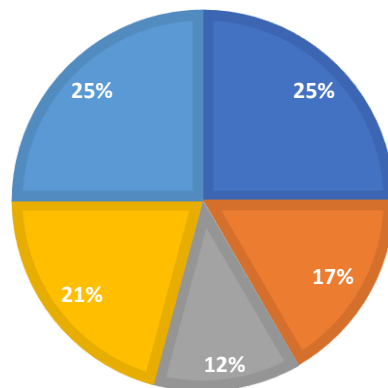
Primary Domain	Sub-domain
Access/Barriers	Location, Qualify, Transportation
Chronic/Communicable Disease	Cancer, Cardiovascular, HIV, HPV, Hypertension, Obesity, Oral Health, Immunization, Physical Activity, Vaccination
Culture/Language	Culture, Ethnicity, Language, Minority, Race, Similarity
Economics/Financial Security	Cost of living, Inflation, Economics, Expenditures, Expenses, Money, Unaffordable
Education	College, High School, Knowledge, Literacy, Vocational School
Environment	Air Quality, Biking, Injury, Physical Environment, Road Quality, Traffic, Safety, Walk
Food Insecurity/Nutrition	Cooking, Food Desert, Nutrition
Inequality/Disparities	Elderly, Homeless, Racism, Red-Lining, Unemployed, Veteran
Infrastructure	Healthcare, Hospital, Insurance, System, Tax, Technology
Legislation/Government/Federal	Federal, Government, Lobbying, Medicaid, Medicare
Mental Health	Depression, Hopeless, Mental illness, Psychiatric, Psychotic, Stigma, Stress
Programs and Services	Application, Initiative, Partnership, Program, Project, Service, Solution, Volunteer
Substance Abuse	Addiction, Alcohol, Heroin, Opioids, Treatment
Support Groups	Empowerment, Outreach, Support
Women+Infants+Children	Baby, Child, Childcare, Maternal Mortality, Mother, Women, Reproductive Health

CODE DISTRIBUTION

The chart shows counts by category:
- Barriers to Healthcare: 47
- Education: 45
- Programs and Services: 45
- Economics/Financial Security: 42
- Inequality/Disparities: 39
- Mental Health: 26
- Infrastructure: 24
- Chronic Disease: 21
- Women+Children+Infants: 21
- Environment: 20
- Food Insecurity/Nutrition: 18
- Substance Abuse: 16
- Legislation/Government/Federal: 13
- Support Groups: 12
- Culture/Language: 9

SOURCE INDEX

Merriam, S. B. & Tisdell, E. J. (2016). Qualitative Research: A Guide to Design and Implementation [4th Edition]. Jossey-Bass.

Long Island's Libraries: Caretakers of the Region's Social Support and Health Needs

Results of a two-year study

Conducted by researchers at
Stony Brook University, Program in Public Health
Adelphi University, Master in Public Health program
In partnership with the Long Island Health Collaborative (LIHC).

July 2021

Introduction

During a two-year period, from December 2017 to February 2020, researchers from Stony Brook University and Adelphi University interviewed library staff at randomly-selected public libraries throughout Long Island to gather information about the breadth and scope of the health and social support needs of library patrons. They also sought to learn about library staff members' ability to address these needs and their level of preparedness to do so, how staff make decisions about types of programming offered, and what additional resources libraries need to improve the health of their communities. Increasingly, empirical evidence points to the key role that public libraries play in delivering some of the health and social support services an individual requires to live his/her best life. Public libraries are invaluable community health partners, especially in socioeconomically-distressed neighborhoods.

Social determinants of health – those factors outside of medicine that influence an individual's health – account for nearly 80 percent of health outcomes, according to a growing body of public health and medical research.[1] [2] [3] [4]These factors include education, poverty, access to

transportation, safe and affordable housing, health insurance coverage, and access to nutritious and affordable foods, among others. Increasingly, it is these needs that public libraries often address in their community programming. In higher need communities, some libraries retain a full-time social worker. Others opt for part-time or per diem social workers to assist with meeting community health and social service needs.

Achieving health is multi-faceted.

A variety of community-based organizations (CBOs) provide services to meet behavioral and social determinant of health (BSDH) needs. **Libraries** are key among this group of CBOs, as they are trusted sources of vital programming, information, and resources in the community.

Although hospitals and other healthcare professionals provide clinical care, they also offer SDH interventions.

Other CBOs Offering SDH Interventions

(Counterclockwise from top right):

- Public Transit
- Hospitals
- Recreational Facilities
- Public Parks
- Food Banks
- Employers
- Faith-Based Organizations

Behavioral & Social Determinants of Health

20% Health Care Clinical Interventions

10% Physical Environment

40% Socioeconomic Factors

30% Health Behaviors

Graphic: ***Factors Influencing Health****. ©Nassau-Suffolk Hospital Council/Long Island Health Collaborative*

Researchers found that there was a difference between the needs and program offerings based on the socioeconomic status of the neighborhood in which the library is located. Higher need communities (generally located in lower-income areas) sought programs assisting with more basic social service needs (such as unemployment, food scarcity, tech literacy, etc.) while in lower need communities (generally located in higher-income neighborhoods) patrons sought more enrichment assistance (such as cooking classes, art programs, etc.). But overall, when it

came to health needs, concerns related to **mental health/substance misuse, heart disease/diabetes, and cancer were consistent themes in most libraries.**

The research began when the New York State 2013 – 2018 Prevention Agenda and its priorities were in effect and so coding reflected themes embedded in that version of the state's Prevention Agenda, as well as the Kaiser Family Foundation social determinants of health rubric.

The research occurred prior to the start of the coronavirus pandemic, which was declared a national emergency on March 13, 2020. Library programming came to a halt as libraries were ordered to close before re-opening some months later for virtual programming only. The pandemic exacerbated the inequities in our social and health systems, and libraries, which had been an accessible resource for many communities, were shutdown perhaps at a time when they were needed the most. On June 24, 2021, New York State's declaration of emergency was halted and many pandemic restrictions were lifted. As of this writing (July 2021), the federal public health emergency declaration remains in effect. Many of the region's libraries have re-opened but with limited in-person services.

Social Determinants of Health

Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	
Medical bills	Playgrounds				Quality of care
Support	Walkability	Higher education			

Health Outcomes
Mortality, Mobidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

There are 113 public libraries on Long Island. Of these, 18 libraries in Suffolk County (from 26 randomly selected) and 14 libraries in Nassau County (from 27 randomly selected) consented to participate in the qualitative research study.

The Long Island Libraries Qualitative Research project grew out of a similar project that occurred among the public library system of Philadelphia known as the Free Library of Philadelphia. Investigators at the University of Pennsylvania published results of their research in *Health Affairs*[5] and this caught the attention of the Long Island Health Collaborative and its academic partners. After reading the article *"Beyond Books: Public Libraries as Partners for Public Health,"* Long Island researchers reached out to investigators at the University of Pennsylvania to learn more about the Philadelphia project. After sharing ideas, the Long Island researchers collaborated with the team at University of Pennsylvania, approved by the University of Pennsylvania's Institutional Review Board (IRB), to conduct interviews among Long Island public librarians and staff.

Selection and Recruitment Methods

The Long Island Health Collaborative staff worked with the researchers to develop a recruitment strategy that began with ensuring that a representative sample of public libraries was achieved. After a complete list of libraries was verified by the Nassau Library System and the Suffolk County Cooperative Library System each public library was sorted by zip code/location. Several towns had more than one zip code but only one library, and several different library locations were located within the same zip code. Researchers accommodated this by developing a selection process that (1) eliminated zip codes without library locations, and (2) included all libraries in the selection process, despite having multiple branches or more than one library in a single zip code.

Using the demographic factors pulled from 2014 American Community Survey, libraries were then sorted by county and categorized into need levels from "low-need" to "high-need" by the following demographic factors:

- **Education** – percentage of high school graduates or higher in the population that are 25 years and over and percentage of bachelor's degree or higher in the population that are 25 years and over.
- **Language** – percentage who speak only English
- **Unemployment** – unemployment rate for population 16 years and over
- **Poverty status** – percentage below poverty level (estimate) and population for whom poverty status is determined
- **Public assistance** – percentage of households with cash public assistance or food stamps/snap for the past 12 months
- **Income** – median household income (dollars)

- **Foreign born residents** – percentage of foreign born

Each demographic factor received a county score by using an inverse average formula used for: unemployment, poverty assistance, public assistance and foreign born and an average score determined for each zip code using the average of all demographic scores. Libraries were then sorted into need categories from highest need to lowest need. The top 20 percent of libraries were determined to be located in a "high need" area (quintile 5) and the bottom 20 percent of libraries were determined to be located in a "low need" area (Quintile 1). All other library locations were categorized as either "moderate high need," "moderate need," or "moderate low need" communities. (Appendix A) As a reference, there were 11 locations in Suffolk and 9 locations in Nassau that were categorized as high-need communities.

After the list of public libraries in each county was organized into "need" categories, the team used a simple block randomization strategy to select 50 percent of those in each category for an invitation to participate in the study. Using this method, on average there were five libraries from each quintile that were randomly selected to be recruited for participation in this study. The randomly selected list of libraries was sent to the outreach directors at the Suffolk Cooperative Library System and the Nassau Library System who then sent an email notification to each of the library directors from the selected list to inform them of the research project and encourage them to participate. Library directors were then contacted by the Long Island Health Collaborative for a more in-depth explanation of the research project, invite their participation, and to schedule the interview. Three attempts to connect (one email and two phone follow-ups) were made.

Interview Process

Total interview time lasted from 1.5 to 2 hours, including time for further project explanation and signing informed consent documents. Interviews were audio recorded. The goal was to interview three staffers at each library – always the library director and then such staff members as front desk clerk, reference librarian, security officer, and custodian. Directors chose the staff members. Interviewees were given a participant number to ensure anonymity and confidentiality. Letters were assigned to each of the libraries to ensure facility anonymity. The interviewers used a standardized set of questions and prompts so that there was consistency in the themes explored across each site. Interview recordings were uploaded to a secure HIPAA-compliant website approved by the University of Pennsylvania's IRB and an IRB-approved transcription service transcribed each interview into a separate word file for each interview. A total of 96 interviews were completed.

Coding and Data Analysis

The transcribed interviews were reviewed by researchers at Stony Brook, and they trained and supervised a team of four research assistants to create a coding scheme for all of the interview files for both counties. The transcribed interviews were coded based on themes that emerged from the interviews across sites using a qualitative analyses software (DeDoose) licensed to Stony Brook's Program in Public Health. The analyses resulted in a robust coding schema with 11 categories and many subthemes within each category. A summary of primary findings is summarized below, and a peer-reviewed publication of more in-depth findings is expected to be available within the year (currently under review by a scholarly journal with LIHC included as a co-author). Once the journal publication of the more in-depth analyses is available for release, we will share it with all LIHC partners.

The overarching questions that were used to motivate the data analyses were:

(1) What is the knowledge of library staff about the social support and health needs of their patrons?

- What do the staff think are the most pressing health needs of the community they serve?
- What do the staff think are the most pressing social support needs of the community they serve?

(2) What do library staff feel about addressing the health/social support needs of their patrons?

(3) How do libraries address the social determinants of health, if at all?

- What do staff at libraries think is lacking in terms of addressing the social determinants of health in their library?

- What do library staff wish they could do to address the social support and behavioral health needs of their community?

(4) How do libraries make decisions about how to invest in their services?

(5) How do libraries define and prevent/address/manage/respond to/resolve disturbances in the libraries?

Summary of Findings

Top 5 identified health needs	Top 5 identified social needs
Mental Health	Homelessness
Exercise	Technology Literacy
Diet	ESL/LOTE
Opioid Use	Unemployment
Personal Health	Food

Differences in types of programming were identified and there were some trends that higher need communities tended to have programs focused on social service needs, such as assistance with unemployment, access to economic stability support services, hunger solutions, homelessness, ESL/LOTE classes, health insurance assistance and technology literacy. Programs in lower need communities tended to have programs focused on enrichment, such as cooking classes, adult art, yoga, and other wellness opportunities to address loneliness. The moderate-need communities tended to have a mix of programs. The emphasis on social support programs in high-need communities is consistent with the health disparities and inequities individuals in these communities face. This finding, in particular, confirms the key role behavioral and social determinants of health play in health outcomes.

The health topics most likely to be the focus of library programs included exercise, access to health insurance (which is also a social support need), information about diet/nutrition, mental health, and Alzheimer's Disease/Dementia.

Usefulness of Research

Decisions about programs in libraries are largely based on community interests, access to content experts to deliver the programs at low or no cost to patrons, and scheduling. Interviewees' responses reflect the needs of the communities served by the libraries. The findings from the Long Island Libraries Qualitative Research project can be used to inform future health and social support service programming offered by libraries, including resource and staff allocation. This is also true of the partnering organizations with which many libraries work, such as the local hospital and health department, and the many community-based organizations that bring health and social support service programming to libraries.

In conjunction with the Long Island Qualitative Research project, graduate students from the Stony Brook University Program in Public Health and undergraduate students from the Hofstra University Community Health Degree program mapped the health and social support service programming at all of Long Island's libraries. Their efforts produced two interactive layered maps – one for use by researchers and one for the public's use. The latter map includes convenient links to library websites. The students reviewed data from 2016-2018 by analyzing publicly accessible newsletters, calendars, pamphlets, flyers, and websites. Content analysis was conducted for every program and coded by social determinants of health and Prevention Agenda (2013-2018) Priority Health topics and results were entered into an Excel spreadsheet.

Further Study

As this research was conducted prior to the COVID-19 pandemic, it would be helpful to conduct a limited follow-up study asking specific questions related to how libraries responded to

community needs during the pandemic. Libraries pivoted to virtual programming. It is likely this new mode of delivery had an effect (positive or negative) on the scope and breadth of programs and community members' access to such programming. Results from such a follow-up could also be compared to the current study results to determine the change in volume and type of programming offered before, during, and after the pandemic.

Acknowledgements

The Long Island Libraries Qualitative Research project is a good example of collaboration at its best. A public and a private university joined forces with local public libraries located in diverse communities under the organizational leadership of a multi-sector coalition – the Long Island Health Collaborative. The voluntary efforts of the academic researchers, public health students, and support staff who worked on this project are very much appreciated. Most importantly, we thank the individual library directors and each member of their staff for their time and graciousness in hosting the researchers and for participating in the study. Special acknowledgement goes to Valerie Lewis, the Administrator of Outreach Services for the Suffolk Cooperative Library System and Nicole Scherer, Assistant Director of the Nassau Library System. Without their assistance, this study never would have occurred.

Long Island's public libraries are led by exceptionally caring individuals with dedicated and compassionate staff. They are centers of community life and provide a place where patrons can go to learn, to be safe, and to be part of their community.

The LIHC acknowledges its partners in this research project.

[1] https://www.kff.org/racial-equity-and-health-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/

[2] Hacker KA, Alleyne EO, Plescia M. Public Health Approaches to Social Determinants of Health: Getting Further Faster. J Public Health Manag Pract. 2021 Sep-Oct 01;27(5):526-528. doi: 10.1097/PHH.0000000000001410. PMID: 34292912.

[3] Henize AW, Beck AF, Klein MD, Adams M, Kahn RS. A Road Map to Address the Social Determinants of Health Through Community Collaboration. Pediatrics. 2015 Oct;136(4):e993-1001. doi: 10.1542/peds.2015-0549. Epub 2015 Sep 21. PMID: 26391941.

[4] Bhattacharya D, Bhatt J. Seven Foundational Principles of Population Health Policy. Population Health Management vol. 20,5 (2017): 383-388. doi:10.1089/pop.2016.0148

[5] Morgan AU, Dupuis R, D'Alonzo B, Johnson A, Graves A, Brooks KL, McClintock A, Klusaritz H, Bogner H, Long JA, Grande D, Cannuscio CC. Beyond Books: Public Libraries as Partners for Population Health. Health Affairs 35, no.11 (2016):2030-2036 doi:10.1377/hlthaff.2016.0724.

Hospitals, Hospital Association and Hospital Systems	Website
Catholic Health	https://www.chsli.org/
Cohen Children's Medical Center	https://childrenshospital.northwell.edu/
Stony Brook Eastern Long Island Hospital	https://elih.stonybrookmedicine.edu/
Glen Cove Hospital Northwell Health	https://glencove.northwell.edu/
Catholic Health Good Samaritan Hospital Medical Center	https://www.chsli.org/good-samaritan-hospital
Huntington Hospital Northwell Health	https://huntington.northwell.edu/
Long Island Community Hospital (Formerly Brookhaven Memorial Hospital Medical Center)	https://licommunityhospital.org/
Long Island Jewish Valley Stream Northwell Health	https://valleystream.northwell.edu/
Mather Hospital Northwell Health	https://www.matherhospital.org/
Catholic Health Mercy Hospital	https://www.chsli.org/mercy-hospital
Mount Sinai South Nassau	https://www.southnassau.org/sn
Nassau-Suffolk Hospital Council	https://suburbanhospitalalliance.org/nshc/
Nassau University Medical Center	https://www.numc.edu/
North Shore University Hospital Northwell Health	https://nsuh.northwell.edu/
Northern Metropolitan Hospital Association	http://suburbanhospitalalliance.org/normet/
Northwell Health System	https://www.northwell.edu/
NYU Langone Hospital – Long Island	https://nyulangone.org/locations/nyu-langone-hospital-lo

Peconic Bay Medical Center Northwell Helth	https://www.pbmchealth.org/
Plainview Hospital Northwell Health	https://plainview.northwell.edu/
Catholic Health St. Catherine of Siena Medical Center	https://www.chsli.org/st-catherine-siena-hospital
Catholic Health St. Charles Hospital	https://www.chsli.org/st-charles-hospital
Catholic Health St. Francis Hospital & Heart Center	https://www.chsli.org/st-francis-hospital
Catholic Health St. Joseph Hospital	https://www.chsli.org/st-joseph-hospital
St. Mary's Healthcare System for Children	https://www.stmaryskids.org/
Stony Brook Southampton Hospital	https://southampton.stonybrookmedicine.edu/
South Oaks Hospital Northwell Health	https://southoaks.northwell.edu/
South Shore University Hospital Northwell Health	https://ssuh.northwell.edu/
Stony Brook University Hospital	https://www.stonybrookmedicine.edu/
Syosset Hospital Northwell Health	https://syosset.northwell.edu/
Veterans Affairs Medical Center	https://www.va.gov/northport-health-care/
Health Departments	**Website**
Nassau County Department of Health*	https://www.nassaucountyny.gov/1652/Health-Departme
Suffolk County Department of Health Services*	https://www.suffolkcountyny.gov/health
New York State Department of Health	https://health.ny.gov/

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Federally Qualified Health Centers	
Advantage Care Health Centers	https://advantagecaredtc.org/
Long Island FQHC, Inc.	https://www.lifqhc.com/
Long Island Select Healthcare, Inc.	https://www.lishcare.org/
Hudson River Healthcare *	https://www.sunriver.org/?referer=hrhcare.org
	-
Medical Societies and Associations	**Website**
Long Island Dietetic Association	www.eatrightli.org
Nassau County Medical Society	www.nassaucountymedicalsociety.org
New York State Nurses Association	www.nysna.org
New York State Podiatric Medical Association	www.nyspma.org
Suffolk County Medical Society *	www.scms-sam.org
	-
Community-Based Organizations	**Website**
AARP Long Island / NY	https://states.aarp.org/new-york/

Adelphi New York Statewide Breast Cancer Hotline and Support Program	www.breast-cancer.adelphi.edu
All Ability Wellness	www.allabilitywellness.com
Alzheimer's Association, Long Island Chapter	www.alz.org
American Cancer Society	www.cancer.org
American Diabetes Association	www.diabetes.org
American Foundation for Suicide Prevention	www.afsp.org
American Heart Association *	www.heart.org
American Lung Association of the Northeast	www.lung.org
Arbors Assisted Living	www.thearborsassistedliving.com
Association for Mental Health and Wellness *	www.mentalhealthandwellness.org
Asthma Coalition of Long Island	www.asthmacommunitynetwork.org
Attentive Care Services	www.attentivecareservices.com
Caring People	www.caringpeopleinc.com
Catholic Charities, Diocese of Rockville Centre	www.catholiccharities.cc
Community Growth Center	www.communitygrowthcenter.org
Cornell Cooperative Extension - Suffolk County *	www.ccesuffolk.org
EPIC Long Island	www.epicli.org

Epilepsy Foundation of Long Island	www.efli.org
Evolve Wellness	www.evolvewellness.net
Family & Children's Association	www.familyandchildrens.org
Family First Home Companions	www.familyfirsthomecompanions.com
Federation of Organizations	www.fedoforg.org
Girls Inc, LI	www.girlsincli.org
Health and Welfare Council of Long Island	www.hwcli.com
Health Education Project / 1199 SEIU *	www.healthcareeducationproject.org
Helping Hands Across Long Island	https://hali.tccm.tv/#:~:text=Hands%20Across%20Long%
Hispanic Counseling Center	www.hispaniccounseling.org
Hudson River Healthcare *	www.hrhcare.org
Island Harvest	www.islandharvest.org
JDRF	www.jdrf.org
Life Trusts	www.lifetrusts.org
Long Island Association *	www.longislandassociation.org
Long Island Association of AIDS Care *	www.liaac.org
Long Island Council of Churches	www.liccny.org
Long Island Community Foundation	www.licf.org

Make the Road NY	www.maketheroad.org
Maria Regina Skilled Nursing Facility	www.mariareginaresidence.org
Maurer Foundation	www.maurerfoundation.org
Mental Health Association of Nassau County *	www.mhanc.org
Music and Memory	www.musicandmemory.org
NADAP	www.nadap.org
Nassau Region PTA	www.nassaupta.com
National Aging in Place Council	www.ageinplace.org
National Eating Disorder Association	www.nationaleatingdisorder.org
National Health Care Associates	www.nathealthcare.com
New Horizon Counseling Center	www.nhcc.us
New York City Poison Control	www.nyc.gov
New York Coalition for Transportation Safety	nycts.org
NutriSense	www.nutri-sense.com
Options for Community Living	www.optionscl.org
People Care Inc	www.peoplecare.com
The Pulse Center for Patient Safety Education & Advocacy *	www.pulsecenterforpatientsafety.org
Retired Senior Volunteer Program *	www.rsvpsuffolk.org

RotaCare	www.rotacareny.org
SDC Nutrition PC	www.call4nutrition.com
Smithtown Youth Bureau	www.smithtownny.gov
Society of St. Vincent de Paul Long Island	www.svdpli.org
State Parks LI Regional Office	www.nysparks.com
Sustainable Long Island	www.sustainableli.org
The Crisis Center	www.thecrisisplanner.com
Thursday's Child	www.thursdayschildofli.org
Town of Smithtown Horizons Counseling and Education Center	www.smithtownny.gov
TriCare Systems	www.tricaresystems.org
United Way of Long Island *	www.unitedwayli.org
Utopia Home Care	www.utopiahomecare.com
Visiting Nurse Services & Hospice of Suffolk	www.visitingnurseservice.org
Walk with a Doc	https://walkwithadoc.org/
YMCA of LI *	www.ymcali.org
	-
School and Colleges	**Website**
Adelphi University *	www.adelphi.edu

Farmingdale State College	www.farmingdale.edu
Hofstra University *	www.hofstra.edu
Molloy College	www.molloy.edu
St. Joseph's College	www.sjcny.edu/long-island
Stony Brook University *	www.stonybrook.edu
Western Suffolk BOCES	www.wsboces.org
Healthy Schools NY *	
	-
Insurers	**Website**
1199SEIU/Health Education Project	www.1199seiu.org
EmblemHealth	www.emblemhealth.com
Fidelis Care	https://www.fideliscare.org/
United Healthcare *	www.unitedhealthcare.com
VSNY CHOICE Health Plans	**www.vnsnychoice.org**
	-
Regional Health Information Organizations	**Website**
Healthix Inc.	www.healthix.org
	-

Businesses and Chambers	Website
Air Quality Solutions	www.iaqguy.com
Custom Computer Specialists	www.customtech.com
Feldman, Kramer & Monaco, P.C.	www.fkmlaw.com
Greater Westhampton Chamber of Commerce	www.westhamptonchamber.org
Honeywell Smart GRID Solutions	www.honeywellsmartgrid.com
LIFE, Inc. Pooled Trusts	www.lifetrusts.org
Marcum	www.marcumllp.com
PSEG of Long Island	www.psegliny.com
TeK Systems	www.teksystems.com
Temp Positions	www.tempositions.com
Time to Play Foundation	www.timetoplay.com
Wisselman & Associates	www.lawjaw.com
WSHU Public Radio (NPR News & Classical Radio)	www.wshu.org
Municipal Partners	**Website**
Nassau Library System	https://www.nassaulibrary.org/
New York State Association of County Health Officials	www.nysacho.org

New York State Department of Parks and Recreation	www.nyparks.com
NYC Poison Control Center	www1.nyc.gov
Suffolk County Legislature	www.legis.suffolkcountyny.gov
Suffolk Cooperative Library System	https://portal.suffolklibrarysystem.org/

* denotes a founding member of the Long Island Health Collaborative

APPENDIX G

CHNA 2022 Prep Work Group Participants

Organization	Individual
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Northwell Health	Taylor Klavans
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APPENDIX H

Appendix H - Research and Supporting Evidence

Social Media

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